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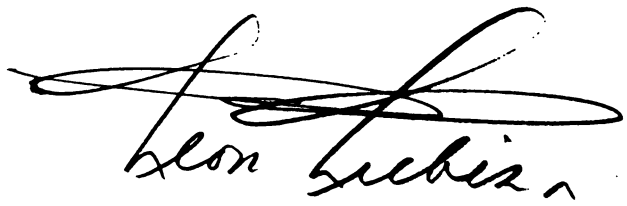

NAVAL STRATEGY

NAVAL STRATEGY

COMPARED AND CONTRASTED WITH THE PRINCIPLES AND PRACTICE OF MILITARY OPERATIONS ON LAND

LECTURES DELIVERED AT U. S. NAVAL WAR COLLEGE, NEWPORT, R. I., BETWEEN THE YEARS 1887 AND 1911

BY

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PREFACE

As stated on the title-page, the text of this book is substantially that of lectures given at the Naval War College, at various periods between the years 1887 and 1911.

The original lectures, which alone represent a methodical treatment, however brief, are contained *seriatim* in seven chapters, six to twelve inclusive. In these there has been some modification of details, owing mainly to the lapse of time introducing changes of conditions; but substantially and in plan they continue as first framed.

My acknowledgments and thanks are due to the proprietors and editor of the *United Service Magazine* (London), for permission to reprint an article contributed to it in 1893. The substance of this is between pages 222 and 242.

I owe thanks also to Rear Admiral Raymond P. Rodgers, President of the College, and to Captain W. McCarty Little, of the College Staff, for facilities and assistance constantly given.

A. T. MAHAN.

October, 1911.

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NAVAL STRATEGY

CHAPTER I

INTRODUCTORY

THE lectures on Naval Strategy, which in revised and expanded form are to be read before you during the present Conference of the College (1909), were written first in 1887; being used in the session of that autumn and again in 1888. Upon this followed the dissolution of the College as a separate institution by Secretary Whitney; but both at the Torpedo Station, with which the College was temporarily merged, and again after its restoration to distinct existence by Secretary Tracy in 1892, the lectures have continued to be read from year to year up to the present, either by myself or by another officer.

From time to time, during this period, substantial additions have been made to the text, but there was no attempt to recast the substance of the lectures. The framework continued as at first, — a statement of principles. It was chiefly in illustration, either from history, or from a reconsideration of contemporary political conditions, that addition or change was made. All these modifications, also, were occasional, even casual. When a thought occurred as apt, it was jotted down; but at no time was methodical revision undertaken, nor would it have been now save for the suggestion, first, of Rear Admiral Luce, the father of the College, and afterwards of Rear Admiral Merrell,

president of the College in 1908, when this revision was begun.

From first writing to formal revision, therefore, twenty-one years elapsed; the term from birth to majority. During that time the growth of matter in the lectures was confined to such incidental development as has been stated above. The attempt at systematic revision, now to be made, prompts naturally some reflection upon the changes in conditions in the intervening period, by which the conduct of war has been affected.

The most notable of these changes are external to the subject of Naval Strategy in itself; and necessarily so. They affect it much; but they do so from the outside. Based as Naval Strategy is upon fundamental truths, which, when correctly formulated, are rightly called principles, these truths, when ascertained, are in themselves unchangeable; but it by no means follows that in elucidation and restatement, or by experience in war, new light may not be shed upon the principles, and new methods introduced into their application. This will constitute development; alike in the practice of Naval Strategy, and in that statement of its laws and principles which we call theory. The physical sciences supply us here with apt analogies. The laws governing them, for example electricity, are immutable; but, in the application of the laws, the lifetime of a generation testifies how great modification and progress are possible. They are possible, and are effected, through many minds acting upon them, and through numerous experiments being made; the analogy to which, in our profession of war, is the experience of warfare.

It seems appropriate here to mention, if only incidentally, certain changes in the weapons with which war is waged. Especially to be noted are the disappearance of the ram from consideration, as a weighty factor in tactics; and, on

the other hand, the progress of the submarine, the immensely increased range of the automobile torpedo, and the invention of wireless telegraphy. In 1887, the effective range of the torpedo was reckoned at little over five hundred yards; the submarine, although a well-developed conception of long standing, had scarcely come to be taken into account as a practical factor; and wireless telegraphy was unheard of, — at least by the public. In the very first course of lectures delivered by me at the College, in 1886, before these now under consideration were begun, I suggested, as a possibility for a fleet blockading the United States coast, that the separate squadrons, say before New York, the Delaware, and the Chesapeake, could be kept in communication by a submarine cable.[1] That was probably practicable; but the same end is now assured much more quickly, more readily, and more certainly by the wireless.

On the other hand, the submarine and the greater range of the torpedo will place a far greater strain on blockaders, and compel them to keep at a much greater distance. These consequences will not change the principles of strategy, but they will affect the application of it. An illustration of this has been afforded by the Japanese battleships taking position sixty miles from Port Arthur, which they were watching, at the Elliott Islands, and by the elaborate provision made against torpedo attack even there; while other measures insured their probably reaching the scene betimes, if the enemy undertook to come out. As to the effect of wireless, Togo could await Rozhestvensky where he did, at anchor, because wireless assured him of the shorter line in order to reach the point of interception. Could he have known of the enemy's approach only through a scouting system which, though itself equally good, was dependent upon flags or lights for transmitting information, he might have had to keep nearer the line of

[1] "Influence of Sea Power upon History," p. 85.

the enemy's route, at the probable disadvantage of remaining at sea. This does not affect the well-recognized, ancient, strategic principle of the value of interior lines; but it does seriously modify its application, and appears to me a new confirmation of Jomini's *dictum* that changes in weapons affect practice, but not principles.

As contributions to development, neither experience of war, nor the treatment of war by professional writers, has been wanting to the twenty-one years now immediately under consideration. In the matter of experience there have been three wars, in which navies have borne an active part: between China and Japan, in 1894; between the United States and Spain, in 1898; and between Japan and Russia, in 1904–1905. Equally obvious, although not equally on the surface, may be cited the war between Great Britain and the Boer Republics in Africa. The British Navy, as navy, did not fire a gun; but, in the apparent temper of Europe, the decisive superiority of the British fleet to any probable combination against it assured the control of the sea, and with it the necessary transportation of force, beyond chance of interruption. We have but to consider the recent revelations of German naval progress, and their effect upon British feeling, in order to realize what the anxieties of Great Britain would be a few years hence, with a like war on her hands, and the German navy what it promises then to be. Naval Strategy is being elucidated, and is developing; but we are not yet in sight of the time when it will be antiquated.

A proof that it is still in the vigor of its prime, and an early prime at that, is to be found in the change in the distribution of navies which has taken place since these lectures were first written. We all recall — there is scarcely one here so young as not to recall — the distribution of our own fleet twenty years ago: the European squadron; the Asiatic squadron; the Pacific squadron,

etc. This was no specialty of the United States, but was reflected in all the great services. Police duty, it was called, and quite accurately; for the distribution was that of police, not that of a military organization calculated for military use. So American ships, and those of other nations, were dotted singly around the world, in separate ports; with single beats, like that of a policeman.

How changed present conditions, how entirely concentration — which is military — has taken the place of dispersion, it is needless to insist. This is an effect of Naval Strategy, adapted to changes in conditions; but it is fair, in drawing attention to the change, to repeat that the principles of Naval Strategy have not altered. They have merely received elucidation by experience and by reflection. Men's minds have turned — it will be more accurate to say, have returned — to ideas and practices which were familiar enough to our predecessors, who had been to school to War itself; but which, in the absence of that most excellent instructor, had lapsed out of mind. This return has been due partly to the wars we have mentioned; partly to obvious changes in international relations; but largely also, beyond question, to the appreciation of the bearing which the sea and the control of it have in war, and to the consequent consideration — reflection — how best to use naval power, a mental process which this recognition of its value has prompted and sustained.

Such use of naval power is naval strategy, whether applied in peace or war; and the study of naval strategy, systematically, began here at the Naval War College. There was plenty of naval strategy before; for in war the common sense of some, and the genius of others, sees and properly applies means to ends; and naval strategy, like naval tactics, when boiled down, is simply the proper use of means to attain ends. But in peace, as in idleness, such matters drop out of mind, unless systematic provision is

made for keeping them in view. For this purpose this College was founded; and if it had produced no other result than the profound realization by naval officers of the folly of dividing the battle-fleet, in peace or in war, it would by that alone have justified its existence and paid its expenses. It is known that the decision of the General Board, that it was inexpedient to divide the battle fleet between the two oceans, was largely influenced by the experience of the war games played here. I had this from the late Admiral Sperry, whose recent death the Navy still deplores. It is well to remember continually that the Senate of the United States, in the year 1909, adopted a recommendation to the President for the division of the present battle-fleet between the Atlantic and Pacific coasts. So distributed, the division in each ocean would have been decisively inferior to a foreign battle-fleet there present; to which fleet the two would have been equal or superior, if united. No more convincing instance exists, to my knowledge, of the need of statesmen and people to know something about the A, B, C of Naval Strategy; for this principle, of concentration, is the A, B, C. Like the A, B of the Greeks, which gave its name to the whole of their alphabet and ours, concentration sums up in itself all the other factors, the entire alphabet, of military efficiency in war. In another way, Napoleon expressed this in a notable saying: "Exclusiveness of purpose is the secret of great successes." Exclusiveness of purpose means concentration of the will upon one object to the exclusion of others. There is thus a concentration of mental and moral outlook, of resolution, as real as the physical concentration of disposable forces; and when the moral prepossession exists in a military man the physical concentration will follow, as surely as any effect follows upon its cause.

To illustrate the permanence of considerations affecting naval strategy, considerations which are not so much

principles as the outflow of principles, bearing to principles the relation which fruit bears to its tree, three incidents may be cited, which, though widely separated in time, and in superficial conditions, are closely related through the principle common to them all.

1. Nelson, over a hundred years ago, on his last visit to England, when the public mind was greatly excited about an anticipated action between a British fleet under Calder and a much superior hostile body, said, "This I freely venture, that, when they shall have beaten Calder, they will give England no further trouble this year." What he meant was, that the enemy as well as Calder would be removed from the board, and that Great Britain's reserve forces would still dominate the situation.

2. Nearly ninety years afterward, at the opening of the College session in 1892, I had occasion, with reference to the obsolescence of ships of war, to quote a then contemporary opinion, which I believe to have been perfectly just. The quotation ran thus: "The last expression of foreign professional opinion, concerning these so-called obsolete ships, is that, in the later stages of a war, when the newest ships have undergone their wear and received their hammering, the nation which then can put forward the largest reserve of ships of the older types will win."

3. This leads by a direct line of precedent to a contemporary instance, an interesting illustration of an historical series, cohering in teaching, from Nelson's seventy-fours to to-day's Dreadnoughts. In the excited debate of March, 1909, in the British Parliament, concerning German naval rivalry, it was assumed on all hands that the number of German Dreadnoughts would nearly equal that of British three years later. On this menacing fact there was general agreement, although estimates differed in detail. But, towards the end of the debate, the Prime Minister asserted, and in my opinion justly, that though in Dreadnoughts

alone the forces might be perilously near equality in number, the great superiority of Great Britain in her second line of ships would yet secure her command of the sea. For, when the two fleets of Dreadnoughts parted, no matter which won, they, like Calder and Villeneuve in 1805, would be removed from the board for the time being, — Nelson's "this year," — and the reserve would come into play.

The principle from which the same conclusion flowed at these three successive epochs is that of keeping a superior force at the decisive point; expressed in the homely phrase of getting there first with the most men. This again is concentration, timely concentration; the A, B, C, of strategy, moving on to the D, E, F. The value of a reserve constituted the decisive factor in the three estimates quoted. A reserve, if correctly constituted in numbers and in position, enables you at a critical moment to be first on hand with the largest force; to *concentrate*, at the decisive period of a battle or of a campaign. It is one method among many to insure superiority of numbers, each method adapted to its particular conjuncture. The consideration of a reserve enforces a judicious abstinence from "scrapping" vessels prematurely, a process which by its effect on a campaign is strategical in its character. If the Russians in the late war with Japan had properly mastered and applied the function of a reserve, if their national method of naval reasoning had not been utterly vitiated by their prevalent theories of a fortress-fleet, they at Port Arthur would have reasoned as did Nelson in 1805: When Togo shall have wiped out the Port Arthur division he will be in no condition to do further harm for some time, and Rozhestvensky can proceed safely. The clear duty of the Port Arthur division was an engagement so desperate as to leave the field clear for the reserves. Japan had none; Russia had. If ever a nation took its fortune in both hands and threw it

overboard, Russia did so in the late war with Japan; and by Russia is meant, not the helpless, irresponsible mass of the population, but the men who in Russia bore to the government the same relation that some of those here present today may bear some time to the Government of the United States. To such men was due the failure of Russia; and in consequence the annexation of Bosnia and Herzegovina by Austria, through the inability of Russia to assert herself. This weakness of Russia, traceable to feeble naval management five years before, has relieved Germany from the menace of Russia on her eastern frontier, and thus has aided that growth of the German Navy which tends to revolutionize international conditions in both hemispheres.

It is trite to remark that a bare assemblage of principles, although useful to an expert, to steady him in moments of doubt or perplexity, can serve little to a novice, who has not clothed them with illustrations drawn from personal experience; or, as in the above instances, from history, which is the experience of others, recorded for our use. To a man so unequipped, principles, however sound, are mere statements resting on external authority, unsupported by the inner conviction and appreciation which alone supply strength in the hour of need. The situation at Copenhagen, wrote Nelson at a certain moment, looks to the novice in war more formidable than it is. That is the statement, and the illustration, of personal experience applied to a present condition and problem. It is a statement, general in character, of the intuitive ability which practice gives to size up a situation. The French call it *coup d'œil* — at a glance. Napoleon has said: On the field of battle the happiest inspiration — again *coup d'œil* — is often only a recollection. This is a testimony to the value of historical illustration, which is simply recorded experience; for, whether the recollection be of what some other man did, or whether it be of some incident one's self has seen and recalls, it draws

upon the past; and that, too, not in a general way, but by specific application to an instant emergency, comprehended at a glance, just because it is familiar.

The two sayings complement each other. Nelson affirms the value of experience — which is History in the making — to develop the faculty of quickly and accurately estimating a situation. Napoleon states the value of History — which is experience recorded — in supplying precedents, available for particular use in a particular emergency. One remark is general, the other specific. Corbett, in his "Seven Years' War," a work I commend heartily to you, notes the careful comments which Wolfe, the conqueror of Quebec, made upon the military movements at which he was present as a subordinate; preserving the record of his own experience to sustain him in his future and triumphant career as commander-in-chief. But the man who thus records his own observations has the temper which collects observations from history also; the temper of the student. When Porter's flotilla was caught above the falls of the Red River, in 1864, by the lowering of the stream, he was fortunate in having at hand men who had had experience in similar conditions. The building of the dam, and the consequent saving of the vessels, was not due to inspiration, but to experience and recollection.

Principle and illustration thus react, the one upon the other, and this interaction shows the necessity of both. The man who possesses the principle is able at a glance to understand the illustration; to appreciate its value. In a paper on Naval Strategy, by Admiral Luce, published by our Naval Institute, he cites the following words of Lord Wolseley, writing about the American War of Secession: "I am struck throughout the whole story of the minor operations of this period by the *illustrations* they afford of the regularity with which the old principles of war assert their supremacy"; and he specifies two instances, saying, "Both

failed, *as might have been predicted.*" On the other hand, the man who, with the principle in his possession, sees for the first time an incident of war, an illustration, thenceforth holds the principle more firmly; because he understands it better. The principle that fire burns is better understood by a burnt child after he has received the illustration of being burned; while the man who profits by his observation of the effects of burning upon another man shows the value of intelligent notice of what goes on around him. There is such a thing as seeing another come to grief, yes, even to destruction, without being one whit wiser yourself, because you do not understand how it happened; and you do not understand, either because you do not see the principle he has violated, or because you miss the application of it in his case, and consequently to your own.

To illustrate: When the Senate passed the recommendation to divide our battle-fleet between our Atlantic and Pacific coasts, not four years had elapsed since the Russian fleet had been destroyed by the Japanese, owing chiefly to its being divided between the Baltic and Asiatic coasts of Russia. The principle of concentration had been recklessly violated; although superior in aggregate force, the Russians continued throughout to be last to arrive and with the fewest men. A man acquainted with the principles of Strategy, and with its illustrations in past history, should have had no need of this additional instance to show him the error of the Russian procedure, — an error which seemingly arose from underrating their enemy, for the exposure was probably due rather to carelessness than ignorance; but to men unacquainted with the principle the new illustration was utterly wasted. They saw their neighbor burned without the slightest idea how it happened; and, like a child not yet burned, undertook with a light heart to expose their country to the same risk.

Therefore, let no man fall into the mistake of under-

valuing military study; for study is simply the intelligent observation of incidents, of events, and drawing from them conclusions which we call principles. This is what science does; and the larger our number of illustrations — observations — the surer are our inferences. The past has done much for us. That which we call history has recorded illustrations, and from those illustrations has formulated principles, ready for our use. It is for us to carry these on; to apply them for action to our own circumstances; and to note how results are affected, as principles are followed or violated, whether by ourselves or others.

Among naval officers, such active interest in current events and in past events has developed greatly since these lectures were first written. The consequence has been the amassing of a large amount of material for study, previously unformulated or undigested. In illustration of this development permit me to quote again from the address delivered by me in 1892 when the College reopened in its new building. I said: "Not only during the time I was actually resident here, 1886–1888, but in the four years which have since elapsed, I have made a practice of sending for the catalogues of the leading military and naval booksellers, at home and abroad, and carefully scanning their contents. Whatever could be found bearing in any way on the Art of Naval War I have had ordered for the College library; with the result that a single one of the short book shelves you can see downstairs contains all that we have to show on the subject of Naval Tactics; and of that space nearly one-half is occupied with elaborate treatises upon the tactics of sailing ships, from Paul Hoste to Chopart." In this remark I added nothing concerning Naval Strategy; for, outside of occasional papers, of the nature of magazine articles, there was no formal treatise except Colomb's "Naval Warfare," published in 1890. Reliance for principles had to be entirely upon works devoted to land strategy.

I am not prepared to say that in the production of elaborate formal treatment of Naval Strategy there has been in these twenty-one years the kind of advance which shows itself in large numbers of books. Formal treatment of Land Strategy is much older; and we would not need a great increase in the number of our fingers to count up the books upon it. Those which by general acclaim can be called standards are necessarily fewer still. But, aside from production in writing, there are signs sufficient of an interest so enlarged as to indicate the working of the leaven of study in all countries. The distribution of the fleets itself bears witness to the prevalence of sounder habits of thought; and the recognition of the necessity of formal study has been shown in the institution by other nations of courses resembling those of this College. Greater attention is being paid to considerations of Naval Strategy at the headquarters, in the administrations which correspond to our Navy Department. The redistribution of duties in the British Board of Admiralty, by the Order in Council of August, 1904, bears the impress of this change; the duties concentrated by it in the hands of the First Sea Lord are essentially strategic in function.

Of books, however, there have been no lack, to testify to the widespread interest felt. Speaking only of the two languages familiar to me, French and English, I think it a moderate statement that thirty years ago works like those of Darrieus and Daveluy in France, or the historical works of Julian Corbett in England — I refer specifically to his "England in the Mediterranean" and "England in the Seven Years' War," — could not have been undertaken. They could not; not because the material for them did not exist, nor yet the brains to utilize the material, but because there was not that general interest which brings the brains and the material into fruitful contact. That the German naval mind has been as active in this direction as might

have been anticipated from the development of military science in the nation I know well; among other ways by works kindly sent me. I have continually to regret an unacquaintance with the language which at my age has barred me from this source of professional profit.

If, as I think is true, this College had a large part in originating this professional movement, it will be interesting to trace that part backward, up stream, to any one of its several sources. As you all know, the College owed its foundation to the urgency of Admiral Luce with the Navy Department. Among the reasons which moved him to undertake and persevere in this was his personal experience of the lack of military perception, of *coup d'œil*, in the administration of the Department which conducted the War of Secession. Months of time, hundreds of lives, and millions of dollars had been expended in the direct frontal attack upon Charleston Harbor by the army and the monitors, one of which was under his command, with the effect, among other incidents, of reducing Fort Sumter to a shapeless mass of ruins; but the city, though shattered by bombardment, still held out, and the flag of the Confederacy continued to fly defiantly over the heap which had been Sumter. Thus things were when Sherman's army arrived at Savannah from Atlanta.

In what follows I quote the Admiral directly.

"From the Nantucket (monitor) I was transferred to the command of the Pontiac, and on the 5th of January, 1865, was ordered to report to General Sherman, then in Savannah, for duty in Savannah River in connection with the Army.

"On reporting at headquarters, General Sherman indicated in a few, short, pithy sentences, and by the aid of a map, his plan of campaign from Savannah to the north. General Slocum, commanding the left wing of the army, was to move up to Sister's Ferry, about forty miles above the city, and cross the Savannah River by means of a pon-

toon bridge into South Carolina. The object in having a gunboat (the Pontiac) was that it might go up the river above the ferry in order to protect the pontoon bridge from molestation by the Confederates; supposed to be in force somewhere in the direction of Augusta. 'When I get on solid ground,' he said (for much of that part of the country was inundated), 'somebody will have to get out of the way!' And he added, in the pleasant style of banter with which he was accustomed to talk to naval officers: 'You navy fellows have been hammering away at Charleston for the past three years. But just wait till I get into South Carolina; I will cut her communications and Charleston will fall into your hands like a ripe pear.' And that is just what actually came to pass."

"After hearing General Sherman's clear exposition of the military situation the scales seemed to fall from my eyes. 'Here,' I said to myself, 'is a soldier who knows his business!' It dawned upon me that there were certain fundamental principles underlying military operations which it were well to look into; principles of general application, whether the operations were conducted on land or at sea."

"Leaving Pocataligo, his army now well in hand, General Sherman marched on Columbia and captured the city with little difficulty. This led to the immediate evacuation of Charleston, February 17, 1865, or a little over three years after capture of Port Royal. Port Royal was the advanced naval base in the waters of South Carolina, upon which depended the direct frontal attack upon Charleston."

In connection with the revision of these lectures I have carefully read among other matter the four books — two French and two English — which I have mentioned to you as apt illustrations of the interesting change in the direction of naval thought in thirty years. Darrieus and Daveluy, while indulging copiously in illustrative instances, adopt formally, and to some extent systematically, the method of my own lectures, till now unpublished. That is, they state principles, which they develop by discussion;

and then adduce their instances, which illuminate the principles, clothing them as it were with the flesh and blood of living action, which differentiates a live man from a skeleton. In this way, while following the logical coherent method of a consecutive development of principles, enunciated as such, a manner of exposition particularly suited to the lucid French intellect and language, they also preserve the historic method for which Daveluy expresses a distinct preference. Thus he says: "History, being the record of experience, if exhaustively studied, brings out *all* the variable factors which enter war; because History, however imperfect, forgets none of them. History is photographic; whereas the rational processes," — that is, when a man having established a certain basis of truth, builds up his system from that without checking it by history, "the rational processes tend to be selective." History, in short, gives you all the qualifying factors; whereas reason, in love with its own refinements, is liable to overlook that which should modify them. In somewhat similar thought, General Sherman once expressed to me a doubt of the value of sham fights; because, he said, you cannot supply the modifying human factor, of apprehension, and of the other various moral influences which affect military action.

Faithful history gives you the whole; and you cannot escape from the effect, or benefit, of this, if you use it conscientiously. But you approach History with powers developed to appreciate what it gives, if you have beforehand the light which is given by principles, clearly enunciated. You come to it provided with standards. For that reason I apprehend that Daveluy and Darrieus, and, so far as they stand the test, my own lectures, form a desirable preparation for works such as those of Corbett, which I have named. Corbett himself has had the advantage, as a military — or naval — historian, of approaching his subject provided with clearly formulated principles, drawn, as he

continually allows to transpire, from standard military writers. In my own experience, it was thus I approached the study of History as a military record. From Jomini's "Art of War," a formal treatise like those of Daveluy and Darrieus, supplemented by his "History of the Wars of the French Revolution," in which he gives history accompanied by strategic and tactical discussion of events, I went on to write the course of historical lectures which subsequently were published under the title "The Influence of Sea Power upon History." It was upon this foundation that I then built up the formulation of principles of naval strategy contained in the original lectures which are now to be read here in their revised and expanded form. The revision and expansion consist principally in new illustration and some restatement; not at all in any novelty of principles, though there may be some novelty in application.

I trust that in these remarks, intended chiefly as preliminary to the course of lectures on Naval Strategy, I have sufficiently made clear the reciprocal action of principles and of historical illustration. Each is a partial educator; combined, you have in them a perfect instructor. Of the two, History by itself is better than formulated principles by themselves; for in this connection, History, being the narrative of actions, takes the rôle which we commonly call practical. It is the story of practical experience. But we all, I trust, have advanced beyond the habit of thought which rates the rule of thumb, mere practice, mere personal experience, above practice illuminated by the principles, and reinforced by the knowledge, developed by many men in many quarters. Master your principles, and then ram them home with the illustrations which History furnishes.

In concluding, I wish to draw your attention pointedly to one remark of Corbett's. I expect to use from him several illustrative incidents in due place; but the remark I here quote bears upon a necessary element of naval

strategic thought which used to be not only ignored, but actually discredited and decried. I mean the appreciation of international conditions as an essential factor in all military plans. I will cite an instance, immediately under our eyes. When Germany shall have finished the ships contemplated in the naval programme which she has formally adopted, she will have a navy much superior to that of the United States, unless we change our present rate of building, and also provide more extensive plants. Upon what then will rest the Monroe Doctrine? and upon what the security of the maintenance of the Panama Canal? The maintenance of both these depends upon the fleet.

The question, if merely one of military force, would be simple: the superior fleet dominates, if the margin of superiority be sufficient. It is the question of political relations which introduces perplexing factors; and the military adviser of a government is not competent to his task, unless, by knowledge of conditions, and practice in weighing them, he can fairly estimate how far inferior numbers may be reinforced by the pressure which other considerations may bring to bear upon a possible enemy. Every naval officer should order his study, and his attention to contemporary events, abroad and at home, by the reflection that he may some day be an adviser of the Government, and in any case may beneficially affect events by his correct judgment of world-wide conditions.

I have just stated a principle, namely, the necessity of including political — international — conditions in military projects. An illustration, the complement of the principle, is the contemporary historical relations of Germany and of the United States to other nations. For instance: there is the solidarity of action between Germany and Austria, lately shown by the pressure of Germany upon Russia to ignore Great Britain and France, and to recognize the Austrian annexation of Bosnia and Herzegovina. I can-

not, of course, enter now into an elaborate analysis of all that this German action means, but I can indicate the, to us, important question involved, which is this: If Germany should wish to embark her fleet in a transatlantic venture, how far will her relations with other European states permit her to do so? If we had no fleet, doubtless she could afford it. If we have nine ships to her ten she probably could not so afford; because the resistance we could put up, whatever the issue, would leave her for the time without a navy to confront Europe. On the other hand, should our Pacific coast citizens precipitate us into a war, or even into seriously strained relations, with Japan, that pressure upon us would add to the force of the German fleet. In our long contention with Great Britain, based on the Monroe Doctrine, we made continuous progress up to the Hay-Pauncefote Treaty of ten years ago. This registered a success for the Monroe Doctrine, which during the month just passed (May, 1911) has been explicitly accepted by the British Foreign Minister. During all this period our navy was hopelessly inferior to the British; sometimes ludicrously so. Yet we won out. Why did we? and are we in similarly good condition for a possible contention with the new Power of the Sea? Where ought Great Britain to stand, in case we have trouble with Germany? and where ought we to stand, in the reverse case?

Corbett's remark is, that in the Seven Years' War the strength of the British action lay in the fact that one great man, the first Pitt, controlled the naval, the military, *and* the diplomatic factors. The several conditions were thus weighed, and were harmonized into a common action, to which all contributed their utmost influence in mutual support. The desirability of the result must fix our eyes upon the fact that in our country it will never be attained through one man, but only by the co-operation of

several. Those several will be statesmen, military men, and naval men; and, in order that their co-operation may be adequate, each must understand the conditions by which the others are controlled. The principle here asserted has received striking recognition in the recent Imperial Conference (1911), when the Government of Great Britain explained the imperial and international situation, as it concerns the common interests of the Empire, to the ministers of Canada, Australia, South Africa and New Zealand, sitting in secret session conjointly with the Imperial Defence Committee. Of these common interests the chief is Imperial Defence; the organization of which thus confessedly depends upon a common understanding of international relations. The often failure of conjoint military and naval operations has been due less to mean jealousy than to lack of such mutual understandings; and for a due grasp of preparation for war, and for planning war, military men of both services need to be imbued with knowledge of international relations. Those relations do affect the amount of force available in various quarters, by the several opponents. Thus Darrieus says correctly:

"Every naval project which takes account neither of the foreign relations of a great nation, nor of the material limit fixed by its resources, rests upon a weak and unstable base. Foreign policy and strategy are bound together by an indestructible link." In this connection he quotes the German, Von der Goltz: "Whoever writes on strategy and tactics ought not in his theories to neglect the point of view of his own people. He should give us a national strategy, a national tactics."

Now the Monroe Doctrine is a point of view of the American people; and no scheme of strategy — such as the numbers and constitution of the fleet — is sound if it neglect this consideration.

My last word to you, then, in these preliminary remarks, is to master, and keep track of, the great current events in

history contemporary with yourself. Appreciate their meaning. Your own profession, on its military side, calls of course for your first and closest attention; but you all will have time enough to read military history, appreciating its teachings, and you can also keep abreast of international relations, to such an extent that when you reach positions of prime responsibility, your glance — your *coup d'œil*, to repeat the French idiom, — will quickly take in the whole picture of your country's interests in any emergency, whether that be pressing or remote. In Nelson's phrase, you will be no novice; and you will not, because you, in your career, as he in his, will have been continually applying the judgment you are then called specially to exercise. Remember also that other expression of Nelson's, "An officer should have political courage." Political courage, to be well based, requires political knowledge as well. That you may more effectually concentrate upon this necessary knowledge, avoid dissipating your energies upon questions interior to the country; questions financial, sociological, economical, or what not. The sphere of the navy is international solely. It is this which allies it so closely to that of the statesman. Aim to be yourselves statesmen as well as seamen. The biography and history of our profession will give you glorious names who have been both. I trust the future may show many such among the sons of this College.

CHAPTER II

HISTORICAL ILLUSTRATIONS AND COMMENTS

IN considering any theater of actual or possible war, or of a prospective battlefield, the first and most essential thing is to determine what position, or chain of positions, by their natural and inherent advantages affect control of the greatest part of it. The reasons which give such control to them should be clearly appreciated by the student, if he is to reach right conclusions himself and afterwards impart them to others.

Thus, in his study of the great theater of war in Germany extending eastward from the Rhine to Bohemia, and northward from Switzerland and the Tyrol to and somewhat beyond the river Main,[1] the Archduke Charles of Austria pointed out that the stretch of the Danube from Ulm to Ratisbon was, and, under all the varying changes of tactics due to the development of weapons, always had been for two thousand years the controlling military feature of the country. The party which firmly held it had always come out conqueror in the strife for the control of the whole region. This statement the Archduke supports by several historical instances. The reasons for this decisive effect of this reach of the Danube upon the whole theater of war are these: the river, from its character, is everywhere an obstacle to the free movement of armies; it is difficult to cross; but it is especially difficult between Ulm and Ratisbon, because the banks are high and precipitous, constituting a defile. This section of the river also is central, not only between the north and south boundaries of the theater

[1] See map facing page 58.

of war, but also between the eastern and western fronts, which are the bases of the opposing armies. Ulm is about as far from the Rhine as Ratisbon is from Bohemia. Consequently, the army which controls the means of passing freely across this obstacle placed in the center of the theater of war, has a decisive advantage over the enemy, who, on whichever side he may be, is cut off from the other; or, if part of his force is on either side, has difficulty to unite. To this advantage, inherent in the natural condition of things, is to be added that of the numerous bridges crossing the Danube in this part of its course, several of which are of a substantial character and heavily fortified. To these points, joined to each other by direct roads along the river, lead also the roads stretching northerly and southerly to different points. In other words, the communications of the country, the lines by which the armies and their trains must move, meet and cross at these bridges. For three hundred years, since the days of Francis I. and Charles V., of Richelieu and Louis XIV., to those of the Archduke Charles and of Napoleon, the states of Germany covering these regions were the object of French and Austrian effort, seeking to control them in the one interest or the other, and these political efforts had often culminated in war. The theater, therefore, had been the scene of many experiences.

The Archduke Charles will be remembered as a prominent Austrian general of the days of Napoleon, but it may not be equally within the memory of all that he was much the ablest of his time, worthy even to contend with the great emperor in person. In 1809, though yielding to Napoleon's superior genius, he retired with honor after a hardly wrung defeat. He had commanded upon this field with conspicuous merit in 1796, when by the cleverness and decision of his movements he got the better of two French armies, together very much exceeding his force,

commanded, the one by Jourdan, the other by Moreau, both exceptionally able generals, but who moved, by the prescribed plan of campaign, the one to the north and the other to the south of the Danube, whereas he himself fell back upon and held a part of this decisive defile. With the enemy thus separated, he turned hastily upon the northern army (Jourdan), for which his grip of the river gave him every facility, drove it rapidly back along and over the Main to the Rhine again. Then the southern army (Moreau), finding him on its flank and rear, and superior to itself alone, was forced to retreat likewise, passing through the Black Forest instead of to the north of it, as in its advance, and crossing the Rhine at Huninguen and Breisach instead of at Strasburg, whence it had started but to which it could not return.

In 1809 the Archduke commanded again in this region, — then against Napoleon himself, — and in the meantime the valley of the Danube had twice been the scene of great campaigns by the French; one under Moreau ending with the well-known battle of Hohenlinden, and later, in 1805, under Napoleon, winding up with the yet more celebrated battle of Austerlitz, in both of which instances the Austrians were overwhelmingly defeated. The attention of the Archduke had therefore been strongly drawn to this scene of war, by its own intrinsic interest and by the effect upon the fortunes of his country. His military ability, and the special interest this theater had for him, the practical acquaintance gained by personal command and responsibility, and the unusual candor with which he points out his own blunders as well as those of others, whether his enemies or his subordinates, are the guarantee of the worth of his study of strategy based upon and exemplified by this historical field of war. This assurance of its value is doubled by the appreciative notice of Jomini, of whose reputation as a military writer and critic I need not speak,

who translated and edited the work with notes, the fewness of which shows his substantial agreement with the Archduke's opinions.

In former days, I have in these rooms traced out these movements of the campaign of 1796 with detailed illustration; showing graphically the successive positions and numbers of the several forces during the critical days of the campaign. The special object now in view does not require this elaboration. It is sufficient simply to show, by the lines on the plan, the distance to which each French army advanced, and to indicate the relative distribution of the various forces, on both sides, at the instant when the French northern army was driven to retreat. After this retrograde movement, the southern army still continued to advance, as shown, until Moreau learned of the retreat of his colleague and the snare into which his own progress since then had been leading himself. It was evident that Jourdan could not stop short of the Rhine; and that his army, demoralized by defeat and retreat, would for a measurable time exercise no restraint upon a southward movement of the Archduke to intercept Moreau. The latter therefore also began to retreat hurriedly; but, before he could regain the Rhine, the pressure of the Austrians towards the upper waters of the river became so ominous that the French were compelled to diverge to the southward, and escaped interception only by crossing at Breisach instead of by Strasburg whence they had set out.

At present I am proposing to bring before you historical illustrations of the importance and value (1) of concentration; and, as means thereto, (2) of a central line, or position, such as the Danube valley, (3) of the interior lines of movement, which such a position presents, and (4) of the bearing of communications upon military tenure and success; of which the necessity of retreat laid upon Moreau is an instance. The most elaborate additional example to this

end which I shall present is drawn from wars over a hundred years antecedent to the campaigu of 1796; but it has an advantage over that very celebrated achievement of the Archduke, in that it not only brings military and naval movement into contrast, and so into mutual illustration, but shows them actually working together. The situation in its distinguishing features is partly military, partly naval. It may be styled quite properly a combined military and naval situation, dependent upon both military and naval conditions; so that the campaigns of the war may be called combined operations, although the combination is not so clearly on the surface that it can be seen without careful analysis. This will be succeeded by a brief account of the purely naval war that followed between the Dutch and English, 1652–1654, with which the narrative will close, and which itself is illustrative of the same lessons of concentration, of central positions, and of interior lines.

The series thus constituted therefore is, first, the purely land campaign of 1796 in Germany, already touched upon; second, the mixed, or combined naval and military situations consequent upon the war of France and her allies against allied Austria and Spain, 1635–1648, in which the central position is indicated by the line of communication from Spain to Genoa by the Mediterranean, and thence by Milan to the Rhine valley;[1] third, the purely naval hostilities between the Dutch and English, 1652–1654, which occurred not long after the war between France and Austria, and was in some measure an outgrowth of that war.[2]

For the latter two instances, I am indebted for much information, and in some measure for suggestion, to Corbett's "England in the Mediterranean;" amplified necessarily by reference to other authors. Corbett in that book has added a very valuable chapter to naval history, and through naval

[1] See map facing page 94.

[2] See maps facing pages 70, 72.

history to general history, by presenting in a connected whole a narrative of the incidents which led Great Britain to the Mediterranean, establishing her as a Mediterranean Power by securely basing her navy in that sea; and, further, by showing the consequent military effect upon the general course of events — the effect on land — which was produced by the presence there of the British navy in superior force.

The entire period covered by "England in the Mediterranean" is from about 1600 to 1713; roughly, from the death of Elizabeth of England to that of Queen Anne, or to the Peace of Utrecht. First and last, we shall touch upon several occurrences in this stretch of time; but the chief part of our treatment concerns the thirty years 1630–1660. By the year 1640 of this period, England was reduced to impotence for external action by Civil War beginning between the King and the Parliament; the power of France had been consolidated by Richelieu; and a struggle, which lasted much over a century, had begun between France and the House of Austria, which then ruled not only in the German territory we now associate with its name, but over Spain as well.

This struggle between the House of Bourbon and the House of Austria was a part of the general conflict known to history as the Thirty Years' War, 1618–1648, which in its scope covered all the continent of Europe west of Russia. This war, while essentially religious in origin and characteristics, nevertheless took in the end the particular form of a political contest between the two dynasties named. Although both were strongly Roman Catholic, their antagonism was determined fundamentally by the fact that German Austria was consolidating the action of the greater part of the German states under the German Emperor, who was of the Austrian family; and that this great concentration of power was sustained by the money and

by the still formidable military strength and military positions of Spain, which was also under Austrian kings. The preceding century had seen this same combination in the hands of a single sovereign, the renowned Emperor Charles V. To prevent the recurrence of such a condition became the policy of France, formulated by Henry IV. and accepted by Richelieu. For this object they associated themselves to the Protestant Powers of northern Europe: Holland, Sweden, and the numerous independent, though relatively small, German Protestant states, which also were geographically northern. These alliances have particular historical interest, because they mark the transition from the religious motive, which had dominated the previous century, — the century of the Reformation, — to the purely political combinations familiar to the following two hundred years. This is also worthy to be noted, because the external policy of Oliver Cromwell, on which we must touch, 1650–1658, when he had consolidated the power of Great Britain for action abroad, was not only colored by the religious motive but deeply influenced by it.

The position of France, as regards the two great Austrian States, was central; and her power was greater than that of either individually. Her need, therefore, was to keep them so separated that the power of one could not reinforce that of the other. This will be recognized by military students as a frequent military situation, and one of absorbing interest when it occurs. In all such instances the underlying principle is constant; but the application varies with circumstances, so that illustration is enforced by novelty and diversity. The situation of France in the case now before us presents a repetition in principle, though differing in circumstances, of that of the Archduke Charles between Jourdan and Moreau in 1796, just spoken of; and this military situation also has its defile of the Danube, in the chain of positions, Genoa, Milan, and the Valtelline passes

of the Alps. Tributary to these, but similarly vital, are the sea communications from Spain; to Genoa on the one hand and to the Netherlands on the other.

France being the enemy, you do not need even to look at a map to know that the resources of Spain, in troops and wealth, could reach the German Austria only by sea. The whole bulk of France, from the Pyrenees to the Rhine, interposed; but beyond her eastern frontier, which the Rhine indicates roughly, — not precisely, — the Spanish Austria held Belgium, then called the Spanish Netherlands, on the North Sea, and the Duchy of Milan in Northern Italy. To the latter of these she had access through Genoa, then in alliance with Spain. Speaking of these conditions, the great German historian Ranke, in one of his most considerable works, says: "The connection of Spain with the Netherlands on the one hand, and with South Italy and Milan on the other, was that which especially ruled the course of international policy between the years 1500 and 1700." This was the result of the day when the Austrian Charles V. was at the same time German Emperor and King of Spain. To the inheritance of Spain and Italy from his mother, he had brought that of Holland and Belgium from his father. At the period of which we are now treating, 1630–1650, Holland had effected an actual though not yet recognized independence, but Belgium remained Spanish.

It followed that, if the ways of the sea were open, Spain having reached the Netherlands on the one side, or Genoa on the other, could then proceed, and on occasions did proceed, by land to any intermediate point on German territory. To twentieth century ears there is an oddness in hearing of Spanish troops acting on the Middle Rhine, and learning that they came from Belgium. The Navy of England was paralyzed at this time by the home troubles. Until these reached their climax, the policy of Charles I.,

though vacillating, was upon the whole favorable to Spain; but the Dutch Navy was hostile to her and formidable. It hindered access by the ocean and the English Channel to the Netherlands and thence to Germany. The Spanish Navy could not face the Dutch. An attempt made in 1639 to send ten thousand troops by this route led to a crushing defeat of the convoying fleet, which the Dutch attacked in the Downs, where it had sought English shelter.

In the Mediterranean the case was different. France maintained there no force equivalent to the Dutch Navy in the North Sea; consequently Spain had open passage to Genoa, and thence by Milan and the Tyrol to the interior of Germany. Her particular route varied according to the circumstances of the times, or the fortunes of war; but in general terms it was Genoa, Milan, and thence by the passes of the Alps to the valley of the Rhine; or to the valley of the Danube. The Rhine was the shorter and more desirable route, but when the power of France trenched upon it, the longer, exterior, route to the eastward, through the heart of Germany, could be used.

Thus, the conditions of the Danube, intermediate between the territory north and south of the river, are reproduced in these Italian Possessions and the adjacent Mediterranean Coasts, intervening between Belgium and Germany on the one side and Spain on the other. Spain, troops and treasure, could go to Genoa only by the Mediterranean. It became therefore necessary for her to control this strip of sea, and necessary for France to dispossess her, either of it, or of the Italian provinces, or of both; for they, like the bridges of the Danube, gave means of passing the Austrian power from one side to the other, and thereby of rapidly effecting local superiority by concentration, which is the fundamental object in all military combinations. The same positions, if in the possession of France, would enable her to concentrate a force of opposition

sufficient to prevent the concentration of the enemy. For these reasons, as early as the reign of James I. of England, before the power of the kingdom had been shaken by civil dissension, and while the Stuart policy was hesitating between "for Spain" and "against Spain," it was proposed by Sir Walter Raleigh, in 1617, to fit out an expedition against Genoa. This project was mooted again in 1624, but on neither occasion came to anything. Successfully effected, it would have blocked the Spanish communications during the period of occupancy. The Valtelline passes of the Alps presented a similar critical link.

The situation of France relatively to her two opponents of this period — Spain and Austria — illustrates three elements of strategy, of frequent mention, which it is well here to name and to define, as well as to illustrate by the instance before you.

1. There is central position, illustrated by France; her national power and control interposing by land between her enemies. Yet not by land only, provided the coast supports an adequate navy; for, if that be the case, the French fleet also interposes between Spanish and Italian ports. The Danube is similarly an instance of central position.

2. Interior lines. The characteristic of interior lines is that of the central position prolonged in one or more directions, thus favoring sustained interposition between separate bodies of an enemy; with the consequent power to concentrate against either, while holding the other in check with a force possibly distinctly inferior. An interior line may be conceived as the extension of a central position, or as a series of central positions connected with one another, as a geometrical line is a continuous series of geometrical points. The expression "Interior Lines" conveys the meaning that from a central position one can assemble more rapidly on either of two opposite fronts than the enemy can, and there-

fore can utilize force more effectively. Particular examples of maritime interior lines are found in the route by Suez as compared with that by the Cape of Good Hope, and in Panama contrasted with Magellan. The Kiel Canal similarly affords an interior line between the Baltic and North Sea, as against the natural channels passing round Denmark, or between the Danish Islands, — the Sound and the two Belts.[1] These instances of "Interior" will recall one of your boyhood's geometrical theorems, demonstrating that, from a point interior to a triangle, lines drawn to two angles are shorter than the corresponding sides of the triangle itself. Briefly, interior lines are lines shorter in time than those the enemy can use. France, for instance, in the case before us, could march twenty thousand men to the Rhine, or to the Pyrenees, or could send necessary supplies to either, sooner than Spain could send the same number to the Rhine, or Austria to the Pyrenees, granting even that the sea were open to their ships.

8. The position of France relatively to Germany and Spain illustrates also the question of communications. "Communications" is a general term, designating the lines of movement by which a military body, army or fleet, is kept in living connection with the national power. This being the leading characteristic of communications, they may be considered essentially lines of defensive action; while interior lines are rather offensive in character, enabling the belligerent favored by them to attack in force one part of

[1] An interesting instance of the method and forethought which cause German naval development of all kinds to progress abreast, on parallel lines, is found in the fact that by the time the three Dreadnoughts laid down in 1911 are completed, and with them two complete Dreadnought squadrons of eight each, which probably will be in 1914, the Kiel Canal will have been enlarged to permit their passage. There will then be a fleet of thirty-eight battle ships; including these sixteen, which will be stationed, eight in the North Sea, eight in the Baltic, linked for mutual support by the central canal. The programme contemplates a continuous pre-arranged replacing of the present pre-Dreadnoughts by Dreadnoughts.

the hostile line sooner than the enemy can reinforce it, because the assailant is nearer than the friend. As a concrete instance, the disastrous attempt already mentioned, of Spain in 1639 to send reinforcements by the Channel, followed the route from Corunna to the Straits of Dover. It did so because at that particular moment the successes of France had given her control of part of the valley of the Rhine, closing it to the Spaniards from Milan; while the more eastern route through Germany was barred by the Swedes, who in the Thirty Years' War were allies of France. The Channel therefore at that moment remained the only road open from Spain to the Netherlands, between which it became the line of communications. Granting the attempt had been successful, the line followed is exterior; for, assuming equal rapidity of movement, ten thousand men starting from central France should reach the field sooner.

The central position of France, therefore, gave both defensive and offensive advantage. In consequence of the position she had interior lines, shorter lines, by which to attack, and also her communications to either front lay behind the front, were covered by the army at the front; in other words, had good defense, besides being shorter than those by which the enemy on one front could send help to the other front. Further, by virtue of her position, the French ports on the Atlantic and Channel flanked the Spanish sea communications.

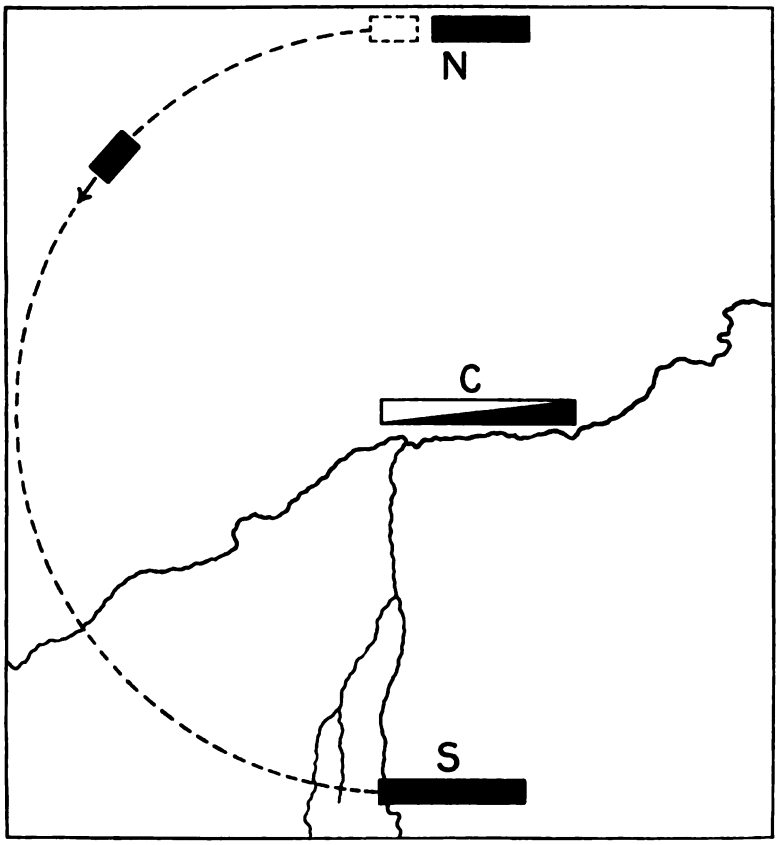
At the present moment, Germany and Austria-Hungary, as members of the Triple Alliance, have the same advantage of central and concentrated position against the Triple *Entente*, Russia, France, and Great Britain.

Transfer now your attention back to the Danube when the scene of war is in that region; as it was in 1796, and also frequently was during the period of which we are now speaking. A most important battle, for instance, Spaniards

and South Germans against the Swedes and North Germans, was fought at Nordlingen, in 1634. Up to that time the mass of the French navy had been kept in the Atlantic ports. Under this condition, Spain had open sea communication with Genoa and Milan, and it was through the junction of Spanish troops coming from Milan, with German troops already in the field, that a decisive victory was gained; after which the Spaniards moved on to the Netherlands. You have seen before, that, if there be war between Austria and France, as there so often was, the one who held the Danube had a central position in the region. Holding means possession by military power, which power can be used to the full against the North or against the South — offensive power — far more easily than the South and North can combine against him; because he is nearer to each than either is to the other.[1] Should North wish to send a big reinforcement to South, it cannot march across the part of the Danube held, but must march around it above or below; exactly as, in 1640, reinforcements from Spain to the Rhine had, so to say, to march around France. In such a march, on land, the reinforcement making it is necessarily in a long column, because roads do not allow a great many men to walk abreast. The road followed, designates in fact the alignment of the reinforcement from day to day; and because its advance continually turns the side to the enemy, around whom it is moving, the enemy's position is said to flank the movement, constituting a recognized danger. It makes no difference whether the line of march is straight or curved; it is extension upon it that constitutes the danger, because the line itself, being thin, is everywhere weak, liable to an attack in force upon a relatively small part of its whole. Communications are exposed, and the enemy has the interior line.

Of tactical movements resembling that of the detach-

[1] See map facing page 34.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S

ment in the figure, Austerlitz, on the part of the allied Russians and Austrians opposed to Napoleon, presented an instance; as did also that of the Confederate detachment under Stonewall Jackson at Chancellorsville. The former, performed under the eyes of Napoleon, resulted in a crushing defeat by his concentrated attack upon the communication between the two wings of the enemy, when the movement had developed so far as to be irretrievable. Jackson's movement, though in itself similarly hazardous to that of the Allies at Austerlitz, was successful because the Union commander-in-chief failed to penetrate the enemy's designs, and consequently did not realize that the army before him was divided into two fractions which could be separated by his concentrated force. He perceived only the danger to his own right flank and rear.

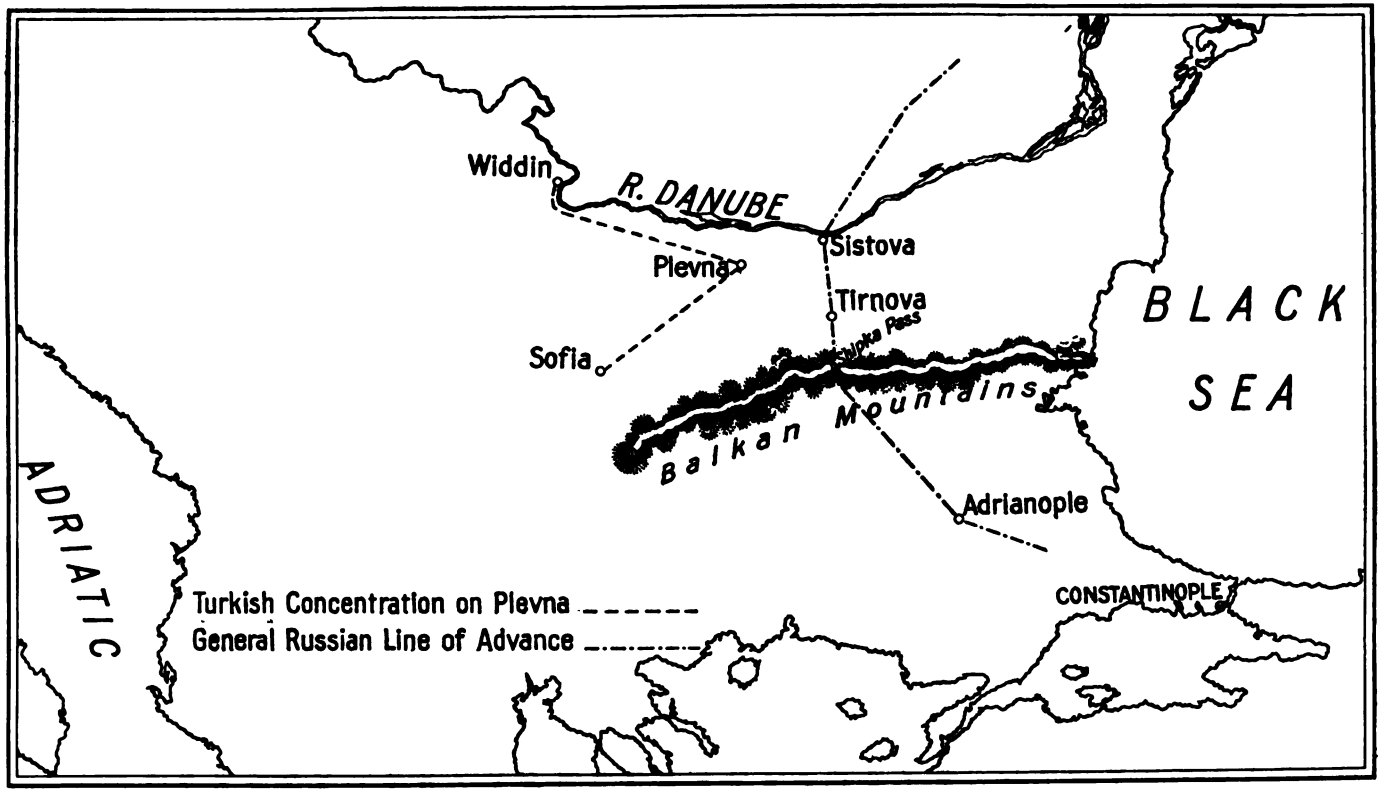
The situation is this: As the detachment, large or small, let us say from North, moves away, the space between it it and the main body becomes at once a line of communication. The farther it moves, day by day, the longer that line. Granting it has supplies enough, it none the less is drawing away from facility of reinforcement, — is in this exposing its communications, is depending on itself alone; a condition which continues until it comes in reach of support from South. During the movement, the whole national army to which it belongs — North plus South — is for the time distributed in three fractions; one of which at least — the detachment — is not resting on a fortified position, as the two principal bodies may be, and as the enemy certainly is, because the river itself is a defense and also has been fortified at the bridges.

None of these disabilities lie upon the central position. A march from one part to the other entails no exposure. It is not meant that the enemy may not attack, but that there is not additional exposure because of the march. An occupied line, assumed as a position, does not have to be weak;

because being stationary, the exigencies of a march, which must follow roads, do not exist, and the troops can be distributed with sole view to mutual support. That is the defensive strength of the central position; the communication between the parts is secure; no gaps, nor weak links. For offensive strength, there are the interior lines. Center is always nearer to North and South than either is to the other; can throw his full force in offense upon one or the other before they can combine in defense; and also, in case of a move such as we have been considering, intended to improve the general situation by a redistribution of forces, center has the opportunity to strike one of the three divisions of his enemy before the others can help.

This is an illustration of the force of Napoleon's saying, that "War is a business of positions." All this discussion turns on position; the ordinary, semi-permanent, positions of Center, North, and South; or the succession of positions occupied by the detachment on that line of communications along which it moves. This illustrates the importance of positions in a single instance, but is by no means exhaustive of that importance. Fully to comprehend, it is necessary to study military and naval history; bearing steadily in mind Napoleon's saying, and the definitions of central position, interior lines, and communications.

Take, for example, an instance so recent as to have been contemporary with men not yet old,—the Turkish position at Plevna in 1877. This stopped the Russian advance on Constantinople for almost five months. Why? Because, if they had gone on, Plevna would have been close to their line of communications, and in a central position relatively to their forces at the front and those in the rear, or behind the Danube. It was also so near, that, if the enemy advanced far, the garrison of Plevna could reach the only bridge across the Danube, at Sistova, and might destroy it, before help could come; that is, Plevna possessed an interior


Widdin
R. DANUBE
Sistova
Plevna
Tirnova
Shipka Pass
Sofia
Balkan Mountains
BLACK SEA
ADRIATIC
Adrianople
CONSTANTINOPLE
Turkish Concentration on Plevna
General Russian Line of Advance

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line towards a point of the utmost importance. Under these circumstances, Plevna alone arrested the whole Russian movement. In the recent war between Japan and Russia,[1] the Port Arthur fleet similarly threatened the Japanese line of communications from Japan to Manchuria, and so affected the whole conduct of the war. It was central, as regards Japan and Liao-Yang, or Mukden. Study of such conditions reinforces knowledge, by affording numerous illustrations of the effect of position under very differing circumstances.

Let us now go back from the Archduke Charles, and the Danube with its Centre, North, and South, to the communications between the Spanish coast and the Austrian army in Germany. Should the House of Austria in Spain desire to send large reinforcements to the Danube, or to the Rhine, by way of Italy, it can do so, provided it controls the sea; and provided also that France has not shaken its hold upon North Italy. Such a condition constitutes open and safe communications. If, however, command of the sea is not assured, if the French navy, say at Toulon, is equal to the Spanish navy in the neighborhood, there is danger of a reverse; while if the French navy is superior locally, there is great danger not merely of a reverse but of a serious disaster. In such a case the French navy, or the port of Toulon, flanks the Spanish line of communication; again an instance of position. As to position, Toulon would correspond to Plevna and Port Arthur. This instance illustrates, however, as Port Arthur conspicuously did, that the value of a position is not in the bare position, but in the use you make of it. This, it is pertinent to note, is just the value of anything a man possesses, his brains or his fortune — the use he makes of either. Should the French navy be decisively inferior locally to the Spanish, Toulon loses its importance. As position it is still

[1] See map facing page 426.

good, but it cannot be used. It is an unavailable asset. So at Plevna, had the garrison been so small that it could not take the field, the place either would have been captured, or could have been watched by a detachment, while the main Russian body moved on. At Port Arthur, the inefficiency of the Russian navy permitted this course to the Japanese. They watched the place by navy and army, and went on with their march in Manchuria. Even so, the threat inherent in the position compelled an immense detachment of troops necessary for the siege, and so greatly weakened the main army in its action.

Note that it is the nearness of Toulon, as of Plevna, which constitutes the menace to the line of communication; the line from the port to that of the communications is thus an interior line, short, enabling an attack by surprise, or in force. It is the same consideration that has made Cadiz at one time, Gibraltar now, Malta, Jamaica, Guantanamo Bay, all threatening positions; the ones to vessels bound up or down the Mediterranean to or from Suez, the others to vessels going to or from the Isthmus of Panama. If it had been feasible for Spain to carry her reinforcements south of Sardinia and thence north, Toulon would so far have lost much of this value. As the line drew near Genoa, it would have regained control only in some measure; that is, to a less degree and for a shorter time. As a matter of fact such roundabout lines, *fausses routes* as Napoleon called them, have played a notable part in the strategy of a weaker party. The most convenient commercial route is not necessarily the most significant to strategy. Napoleon, for example, when bound to Egypt from Malta in 1798, did not go direct, but first sighted Crete and then bore away for Egypt. Owing to this, Nelson in pursuit missed the French because he naturally went direct.

The same beneficial effect — the same amount of protection as a roundabout line would give — might have

been obtained if the Spanish navy on the Atlantic coast threatened French ports and commerce, and thus induced France to keep her navy, in whole or in part, in that quarter, weakening her Toulon force; so that, though favorably situated, it was not strong enough to attack. This was actually the case up to 1634, in which year the defeat of the allies of France at Nordlingen, due to Spanish troops from Italy reinforcing the Imperial armies in Germany, compelled France to declare open war against Spain and to transfer her fleet to the Mediterranean. This effect was produced also in 1898 on the United States; not by the Spanish navy, which was innoxious in everything but talk, but by the fears of the American people, which prompted the American Government to keep the so called Flying Squadron in Hampton Roads, instead of close to the probable scene of war. Owing to this distribution, if Cervera's squadron had been efficient, it could have got into Cienfuegos instead of Santiago; a very much harder nut to crack, because in close railroad communication with Havana and with the great mass of the Spanish army in Cuba. It is the same sort of unintelligent fear which prompts the demand now to send half the battle-fleet to the Pacific. No course could be more entirely satisfactory to an enemy, or more paralyzing to the United States fleet, than just this. All or none; the battle-fleet concentrated, whether in the Pacific or the Atlantic.

You will remember that in the war with Spain the United States navy had reproduced for it the situation I have depicted, of a detachment trying to pass round the Danube from North to South. The "Oregon" was the detachment, and she had to join the American fleet in the West Indies, in spite of the Spanish squadron. She reached Barbados May 18; the day before Cervera entered Santiago, and six days after he left Martinique, which is only one hundred miles from Barbados. The utter ineffi-

ciency of the Spanish navy has caused us to lose sight of the risk to the "Oregon," which was keenly felt by her commander, and concerning which at the moment two former secretaries of the navy expressed to me their anxiety. Despite this experience, there are those now who would reconstitute it for us, half the fleet in the Pacific and half in the Atlantic; exactly the situation of Jourdan and Moreau. Should then war arise with a European state, or with Japan, it would be open to either enemy to take the Danube position between our two divisions, as Togo did between the Port Arthur and Baltic squadrons.

As a matter of experience, in the struggle to which France, Spain, and the German Empire were parties, between 1630 and 1660, the importance of the line of communication from Spain to Genoa became so evident that it changed the general distribution of the French navy, and also led to its enlargement. Richelieu, who died in 1642, had reorganized and consolidated the fleet; he is looked on by many Frenchmen as the real father of their navy. His first distribution, however, had reference to Atlantic conditions. The ocean and the Mediterranean constitute for France the dilemma which the Atlantic and the Pacific present to the United States. Richelieu at the first stationed three squadrons on the ocean, that is, in the Channel and Bay of Biscay; in the Gulf of Lyons only one, and that of galleys, not of sailing vessels. His original motive in reorganizing the navy had been the usual one of the protection of commerce and of the coasts. To that, as the aggrandizement of the House of Austria drew France more and more into opposition to both its branches, in Spain and in Germany, was added the necessity of blocking the communications between them by sea, notably in the English Channel and in the Mediterranean.

France entered the Thirty Years' War openly in May, 1635. For some time before she had been indirectly oppos-

ing Austria, by subsidies, and by partial action favoring her enemies; but the immediate occasion of her taking an active part was the heavy defeat at Nordlingen, August 27, 1634, inflicted upon the allies of France, the Swedes and North Germans. This done, the Spaniards had marched on, by the Rhine, to Belgium — their Netherlands. It may be added that this heavy reinforcement to the Spanish military power in the Netherlands probably had much to do with the Spanish successes in the following years, which at one moment (1636) threatened Paris itself.

To Richelieu's far-sighted political views, the project of obtaining the Rhine as the eastern boundary of France was already present; but at this time his particular military aim was to sever the communications from Italy through the south of Germany, where the Austrian power lay, to the Netherlands, upon which he intended the weight of his attack on Spain to fall, and which he proposed to divide between France and Holland. In order to effect this interruption of communications, he had already, in 1633, taken possession of Lorraine, then an independent German state near, but west of, the Rhine, because it had helped the Emperor. From there the French forces had also entered Alsace, which borders the river. Thus France interrupted the communication by the Rhine valley; but subsequent events, culminating in the battle of Nordlingen, had opened to the Spaniards another line of communication, exterior to that by the valley of the Rhine; longer, but serviceable.

This was too far interior to Germany for France to reach just then; consequently it became necessary to attack that part of the long line of communication which was by sea, viz.: from the east coast of Spain to Genoa. Accordingly, Richelieu in 1636 ordered his Atlantic squadrons round to Toulon. As is often the case, his reasons for this move may have been more than one. Gardiner, the most

recent and exhaustive historian for this period, surmises that the motive was to withdraw the French navy from contact with the English; for the English king, Charles I., though formally neutral, was helping Spain in the Channel. English ships of war convoyed Spanish transports, with men, supplies, and money, to Dunkirk; which, though at the present time French, was then the military port of the Spanish Netherlands. Richelieu did not wish a rupture with England, and the surest way to avoid it was to keep his ships out of the way. This was the more imperative, because the English king viewed with jealousy the efforts of France to create a navy then, exactly as the British people to-day are viewing with fear and distrust the growth of the German navy. The navy of Spain was then a long existent fact, to which, and to beating it, England was accustomed; the French navy was new, and an additional danger. Moreover, Spain was far away; whereas France, like Germany now, bordered the Narrow Seas.

Whatever the reason, the fact is certain that in 1636 the French navy left the Atlantic, and concentrated at Toulon, then a partly developed arsenal, for galleys only. Meantime the Spaniards, to secure the sea communications, had seized the Lerins Islands between Toulon and Genoa, and were fortifying them. This position gave them a base whence to interrupt French coast trade — offensive; and also to support their own communications to Genoa — defensive. It is to this act of the Spaniards, specifically, that Corbett attributes the concentration of the French navy at Toulon; in which case the movement was not an instance of military foresight and sagacity, but the simple recognition of a present condition too obvious to be overlooked. The Spaniards soon after, most inopportunely for themselves, reduced their garrison in the Lerins, which the French were thus enabled to regain in 1637. The advantage of position was thus restored to Toulon.

CHAPTER III

HISTORICAL ILLUSTRATIONS AND COMMENTS
(Continued)

THE general war against the House of Austria, as conducted by Richelieu, appears to have suffered from the same cause that saps the vigor of many wars; he attempted too many things at once, instead of concentrating for decided superiority in some one or two localities. For such concentration he had good opportunities, owing to the central positition and interior lines possessed by France. It was open to him to act in great force either in Belgium, or on the Rhine, or in Italy, or towards Spain. Moreover, he had the initial advantage of a natural concentration: one nation against two, and those separated in space. The proverbial weakness of alliances is due to inferior power of concentration. Granting the same aggregate of force, it is never as great in two hands as in one, because it is not perfectly concentrated. Each party to an alliance usually has its particular aim, which divides action. In any military scheme that comes before you, let your first question to yourself be, Is this consistent with the requirement of concentration? Never attempt to straddle, to do two things at the same time, unless your force is evidently so supreme that you have clearly more than enough for each.

Our profession has never produced a man more daring in enterprise, nor more skilful in management, than Nelson. Remember, therefore, and always, that, when he sent off two frigates on some expedition, he charged their captains:

"If you meet two enemies, do not each attack one. Com-

bine both on one of the enemy; you will make sure of that one, and you may also get the other afterwards; but, whether the second escape or not, your country will have won a victory, and gained a ship."

The same consideration applies to ship design. You cannot have everything. If you attempt it, you will lose everything; by which I mean that in no one quality will your vessel be as efficient as if you had concentrated purpose on that one. On a given tonnage, — which in ship-building corresponds to a given size of army or of fleet, — there cannot be had the highest speed, *and* the heaviest battery, *and* the thickest armor, *and* the longest coal endurance, which the tonnage would allow to any one of these objects by itself. If you try, you will be repeating Richelieu's mistake when he tried to carry on offensive war on four frontiers. He also wanted four things. In the Netherlands he wanted conquest; on the Rhine, to hold the Spanish communications, possibly conquest as well; in Italy, to hold the communications; and lastly, in Spain, to sustain a rebellion in Catalonia with a view to the uniting of that province to France. The war lasted his life, although he lived for seven years after it began. Happily for France, by the force of circumstances her navy could remain concentrated in the Mediterranean. This was due partly to the fact that the fleet of England, which favored Spain, was fettered for offensive action by the growing disputes between the King and the Parliament; but it was owing chiefly to Holland being the ally of France. The Dutch fleet was strong enough to keep the Spanish in check in the Channel, without French assistance, despite Charles' friendly attitude to Spain; for the King was afraid to provoke hostilities by too positive action against Holland, lest he should have to summon Parliament to get money for war.

I am always much in favor of enforcing military anal-

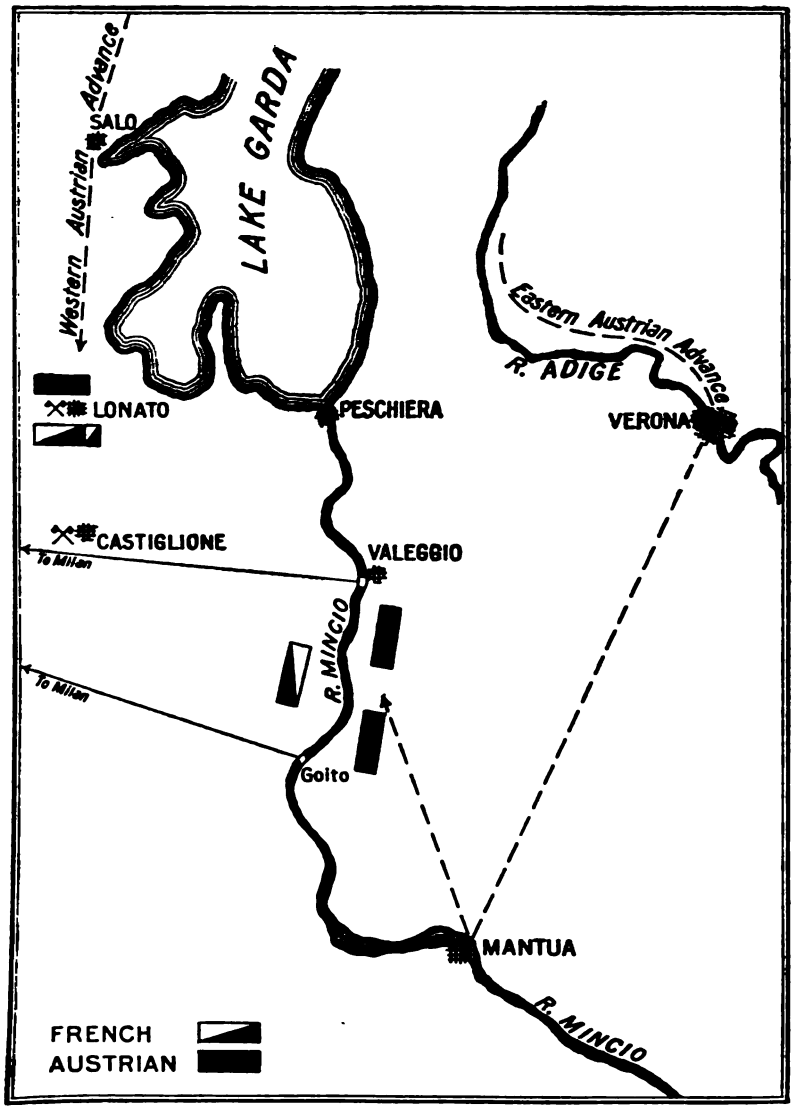
ogies. By this I mean showing the existence and effect of a single principle, underlying and deciding, in circumstances which superficially seem very diverse. Take, for example, the long line of frontier over which Richelieu had to act: the Netherlands; along the Rhine; the Italian Alps; the Mediterranean coast, centering from Toulon to Genoa; lastly, Spain. The proper course would not be to attempt all at once, but to assemble as rapidly and secretly as possible a great preponderance on one part, while in the other quarters the attitude should be essentially defensive, however much this fact should be concealed by a display of energy; making a big smoke, as the proverb says. Now this rule of concentration is precisely the same in the comparatively short line of a battle-field. That is to say, the rule applies to the limited field of tactics, as well as to the broader of strategy. Granting some approach to equality between two opponents, the object of each must not be to have a square set-to all along the front, but to throw the weight upon one quarter, while on the other action is either a feint or a refusal. Refusing, in military parlance, means keeping back part of your force actually, however vigorous and earnest its demonstration may appear.

In land warfare, the part of the enemy to attack will be determined usually by conditions of the ground; because, from these conditions, in addition to a local superiority of numbers, which you effect by concentration, you seek some disadvantage of position somewhere to the enemy, and consequently some increased advantage to yourself. For instance, one flank of the enemy may rest on a river; impassable, or with insufficient bridges. If you attack on the other flank, you may throw him round with his back to the river; when, if defeated, he is evidently in danger of destruction. Or, one flank being driven back, you may force his whole line round at right angles, and drive him off the road behind, by which his supplies come — severing

his communications. This was what Wellington expected Napoleon would attempt in the Waterloo campaign, in order to cut the British off from the sea. Or, again, there may be something in the conditions which encourages an assault upon his center; because, if you break through, you will then, with the advantage of the particular position gained, be able to keep one half in check, while you throw your mass of men on the other half.[1] Napoleon in Italy, for instance, thus used a central position successfully against numbers much superior to his own, which had made the mistake, similar to that of Jourdan and Moreau, of advancing on exterior lines, on either side of Lake Garda, which with its outlet, the Mincio, thus became their Danube valley. Their commander was moved to this division by the superficially plausible idea that while he himself attacked on the east, in front, with superior numbers, driving the French back, the western body would act in the rear, cutting the French communications with Milan and Genoa. Bonaparte at the moment was occupying Verona and besieging Mantua. Abandoning both these positions, he fell back upon the Mincio, and to its west bank. This he held against the eastern Austrians with a small force strengthened by the river, and with the delay thus obtained was enabled to fall upon the western at Lonato in much superior numbers. Those of you who will take the trouble to read Jomini's "Wars of the French Revolution," especially Bonaparte in Italy in 1796, will find instruction in the use of ground. This campaign required special care in utilizing position, because Napoleon was usually in inferior numbers.

Generally, in land warfare, the attack on the flank of an enemy's line is preferred, unless there be strong opposing reasons in the nature of the ground. I apprehend that the reason is substantially this: that each flank is farther from

[1] See map facing page 46.


Western Austrian Advance
SALO
LAKE GARDA
Eastern Austrian Advance
R. ADIGE
LONATO
PESCHIERA
VERONA
CASTIGLIONE
To Milan
VALEGGIO
R. MINCIO
To Milan
Goito
MANTUA
R. MINCIO
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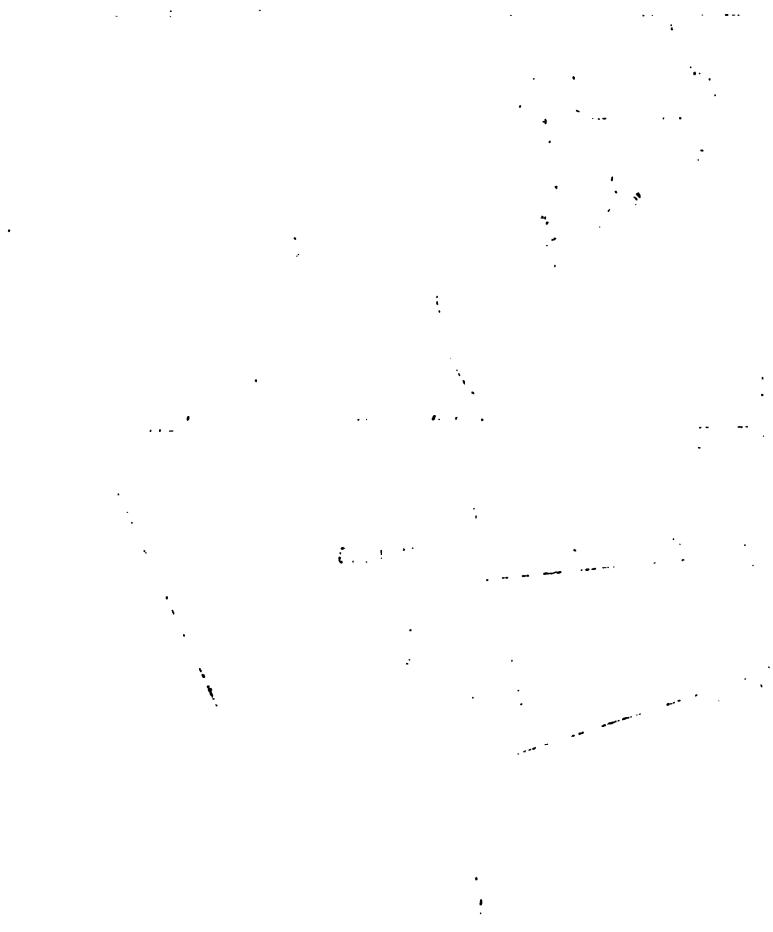


the other than either is from the center. Consequently each flank, and both flanks, can help the center more easily than either flank can help the other. It is, in short, a question of distance, or, more accurately, of time. For instance, reverting to Richelieu's line, it will be seen that if he attacked in force the Netherlands on one flank, it would take Spanish reinforcements from Italy much longer to get there than if he attacked the center, on the Rhine. In naval tactics, as in land battle-fields, this same consideration usually determines the character of attack. There are exceptions. At the battle of Cape St. Vincent the British admiral attacked the enemy's center; but that was because the enemy had left the center so weak — in fact, stripped — that it was possible for the British fleet to interpose between the two flanks, and engage one only of them, as Napoleon broke the enemy's center at Austerlitz.

The fighting order of navies still continues a line; which is called more properly a column, because the ships are ranged one behind the other. Nevertheless, if the arrangement of the guns, from van to rear, is regarded, it will be seen that they really are deployed on a line fronting the enemy. As a rule, in instructed naval warfare, attack has been on one flank of that line. It is commonly spoken of as an attack on van or rear, because of the columnar formation of the ships, but it is really a flank attack; and, whichever flank is chosen, the attack on the other is essentially refused, because the numbers devoted to it are not sufficient to press an attack home. The culmination of the sail era — Trafalgar — was fought exactly on these lines. Nelson concentrated the bulk of his fleet, a superior force, on the left flank of the enemy, which happened to be the rear; against the right flank he sent a smaller number. He did not indeed give specific orders to the smaller body not to attack, or to refuse themselves. That was not his way. Moreover,

he intended himself to take charge of this attack in smaller force, and to be governed by circumstances as to the development of it; but the result was shown in the fact that the larger part of the enemy's right flank escaped, and all probably would if they had maneuvered well. The hostile loss fell on the other flank and on the center; and not only was this the case in result, but also Nelson in form and in his orders purposed just this. He put the concentrated attack in the hands of his second; "I," said he, in effect, "will see that the other flank of the enemy does not interfere." Conditions modified his action; but that was his plan, and although, from the particular conditions, he actually pierced the enemy's center, still, having done so, the subsequent attack fell upon the flank originally intended, while the other flank was kept in check by the rear ships of Nelson's own division. These, as they advanced in column, lay athwart the line by which the enemy's van, if it tacked, would approach the rear, or other flank; and they thus prevented its approach by that route until too late to be effective.

Nelson, who was a thoughtful as well as a daring tactician, expressed reasons for attacking one flank rather than another, under differing conditions in which the fleets presented themselves; but, speaking generally, the rear was the better to attack, because the van could not, and cannot, come as soon to help the rear as the rear can the van. It has to turn round, to begin with; and, before turning round, its commander has to make up his mind, which few men do quickly, unless they have reached conclusions beforehand. All this means time. Besides, the assailant can more easily place himself in the way of such new movement of the van, than he can of the rear coming up on the line of advance it already has. Still, there are some reasons in favor of the van. Nelson in 1801 said that in case of encountering a Russian fleet he would attack the

van; because injury to it would throw the enemy's order into confusion, from which the Russians were not good enough maneuverers to recover. That is a special reason, not a general. It takes account of a particular circumstance, as a general on shore does of a particular locality. When Farragut passed the Mobile forts his van was thrown into confusion, and all know what a critical moment that was. It matters little what the incident is, if the confusion is produced.

In the Battle of the Japan Sea the attack again was on a flank, and that the van. Whether this was due to previous purpose of the Japanese, or merely arose from the conditions as they presented themselves, I do not know; but its tendency certainly would be to cause confusion. I do not wish, however, to argue here a question of tactics. My subject is strategy, and I am using tactics simply to illustrate the predominance, everywhere, under all conditions and from the nature of things, of the one great principle of concentration; and that, too, in the specific method of so distributing your own force as to be superior to the enemy in one quarter, while in the other you hold him in check long enough to permit your main attack to reach its full result. That necessary time may be half an hour on a field of battle; in a campaign it may be days, weeks, perhaps more.

In further illustration, I wish now to apply the same principle and method to the question of coast defense and attack. When a country is at war, its whole frontier, and the whole frontier of its opponent, are subject to attack. This constitutes the defensive aspect of frontiers. They also can be used throughout their whole extent as points from which attack can be made; and this is their offensive aspect, on one side and on the other. In land warfare, as between France and Germany in 1870, or as in the wars of Richelieu of which we have been speaking, it will com-

monly happen that the belligerents adjoin one another, that the political frontier is not only common, but identical — the same line for each. This is not indeed invariably the case. The late war between Japan and Russia was fought mainly on Chinese soil, and Belgium has been proverbially the battle ground for quarrels in which her inhabitants had little national interest. Nevertheless, the military frontier, the line between the two fronts of operations, is substantially common to each belligerent. In maritime warfare this cannot be the case. Here the sea constitutes for each of the two opponents the political frontier, which in so far is common, but from its width is not identical. The intervening sea is less a line than a position, *central* between the two, dividing them from one another, and in so far reproducing the characteristic noted of the Danube. It will readily be recognized that the power which really controls the sea, as Great Britain at times has done, possesses exactly the Danube advantage; she can throw superior force in either direction, for defense or attack.

The war between Great Britain and the United States in 1812 presented an example of both kinds of frontier. There was the land frontier, between Canada and the United States; and there was the American ocean frontier, against which Great Britain operated as she chose, because she commanded the sea, the central position, intervening between America and the British Islands. In my "War of 1812" I have discussed the general situation as embraced in the two frontiers, and also the special conditions of each, as indicative of where the offensive should have been assumed by the United States, and where the defensive; it being evident that all parts were not equally favorable to offensive action, nor did the country possess forces adequate so to act everywhere. I mention these discussions because, whether my own estimates were accurate or not, they serve to illustrate the fact that in any frontier line, or

any strategic front of operations, or any line of battle, offensive effort may, and therefore should, be concentrated in one part, not distributed along the whole. This possibility, and a convenient way of conceiving it, Jomini expresses in an aphorism which may be commended to memory, because it sums up one important consideration concerning any military disposition whatever; whether it be the strategic front of operations in a campaign, or a tactical order of battle, or a frontier. Every such situation, Jomini says, may be properly regarded as a line; and every line divides, logically and actually, into three parts, —the center, and the two extremes, or flanks.

Guard yourselves, of course, from imagining three *equal* parts. We are not dealing here with mathematics, but with military conceptions. For practical results, let us apply at once to the United States of to-day. The United States has a long ocean frontier, broken at Mexico by the interposition of land, as the French maritime frontier is broken at the Pyrenees; yet the coast lines, like the French, possess a certain maritime continuity, in that ships can pass from end to end by sea. In such cases, it may be said without exaggeration that an ocean frontier is continuous. At present, the United States has one frontier which is strictly continuous, by land as by water, from the coast of Maine to the Rio Grande. There are in it, by natural division, three principal parts: the Atlantic, the Gulf, and the Straits of Florida. I do not deny that for purposes of study further convenient subdivisions may be made; but it may fairly be claimed that these three are clear, are primary, and are principal. They are very unequal in length, and, from the military standpoint, in importance; for while the peninsula of Florida does not rank very high in the industrial interests of the nation, a superior hostile fleet securely based in the Straits of Florida could effectively control intercourse by water between the

two flanks. It would possess central position; and in virtue of that central position, its superiority need not be over the whole United States navy, should that be divided on each side of the central position. The supposed enemy, in such position, would need only to be decisively superior to each of the divisions lying on either side; whereas, were they united, superiority would require to be over the whole. It was this condition which made Cuba for the first century of our national existence a consideration of the first importance in our international relations. It flanked national communications, commercial and military. We know that there exists in our country an element of wisdom which would treat such a situation, which geography has constituted for us, as two boys do an apple. This would divide the fleet between the two coasts, and call it fair to both; because, so it is reasoned, — or rather argued, — defending both. It certainly, however, would not be concentration, nor effective.

Before passing on, note the striking resemblance between the Florida peninsula and that of Korea. Togo, at Masampo, was to Rozhestvensky and the Russians at Vladivostok just as a hostile fleet in the Straits of Florida would be to American divisions in the Gulf and at Hampton Roads. In like manner at an earlier period Togo and Kamimura, working apart but on interior lines, separated the three fine fighting ships in Vladivostok from the Port Arthur division.

The United States, however, has an even more urgent situation as to frontier in its Atlantic and Pacific coasts. If my claim is correct, in the instance of France, that a water frontier is continuous when passage from end to end by water is practicable, this is also continuous; and the battle-fleet has demonstrated the fact within the past few years. The United States, then, has a maritime frontier line from Eastport, Maine, to Puget Sound; and, like other

military lines, it divides into three principal parts immediately obvious, — the Atlantic Coast, the Pacific Coast, and the line between. This summary will not be any more true, nor any more useful for reflection, when the line passes by Panama instead of the Straits of Magellan; but it certainly will be more obvious. It then will be seen easily, as now may be seen certainly, that the important part of the long line in the present case, as in the future, is the center, because that insures or prevents passage in force from side to side; the transfer of force; in short, the communications. This reproduces again the Danube position, and also the chain of Spanish positions from Genoa to Belgium. It is once more the central position, which we have met before in such varying localities and periods; but the central position of Panama has over that now open to us, by Magellan, the advantage of interior lines, of which class of lines indeed the contrast between the existing and the future routes offers a notable illustration.

In order to see clearly here, we must recur to statements before made. In what consists the advantage of central position? In the position itself, however strong it be? No; but in the use made of it. The central position is contributory, not principal; one element of a situation, but not the only one, nor even the chief. It is of little use to have a central position if the enemy on both sides is stronger than you. In short, it is power plus position that constitutes an advantage over power without position; or, more instructively, equations of force are composed of power and position in varying degrees, surplus in one tending to compensate for deficiency in the other. If the mobile force, army in the field or navy, be great enough to maintain itself alone in any part of the field, or on any section of the frontier, it holds the central position in virtue of its own strength, and that no matter where it may be. If the American fleet be strong enough to force

its way from one coast to the other, it has the central position by virtue of its own power. When the Panama Canal is fortified, and its locks insured against treachery, the fleet will have power plus position, and fortified position at that; till then, the fleet must depend upon its own power alone to control the center of the line, the freedom of movement from flank to flank, — from the Atlantic to the Pacific, or *vice versâ*. So long as the fleet is strong enough for that, against any particular enemy, the center of the frontier is secure, and consequently the communications. Then, from the pure military point of view, all that either flank requires is to be strong enough to resist attack until the fleet comes to its aid. That is, it requires adequate fortification, in the broad sense which includes harbor works, guns, garrison, and torpedo equipment; and it should have also an organization of land forces which can prevent an enemy's army from establishing itself in impregnable control of some decisive position.

It follows, of course, that where position is assured, and in proportion as it is assured, less force may be needed. Still, if the United States have an enemy in the Atlantic and one in the Pacific, no advantage of position will dispense from the necessity of having a fleet stronger than either the one or the other singly. That is a One-Power standard, the minimum now needed by the United States. The *National Review* for July, 1909, contained an article entitled "Navy and Empire," in which occurs the following definition, in my judgment correct: "The Two-Power standard must mean the maintenance of two fleets, the one superior in all arms to the foreign fleet next in order of strength," that is, the next strongest to the British, "the other superior in all arms to the foreign fleet next again in order of strength." I do not here say that the United States needs a Two-Power standard, as Great Britain may; but, if she did, that is a correct definition of such stand-

ard. Taking present conditions in Europe, and present naval programmes, the Two-Power standard requires that Great Britain have in home waters a fleet distinctly superior to that of Germany, and that she shall be able coincidently to place in the Mediterranean one equally superior to those of Austria and Italy combined.

The interior position will enable you to get there sooner, but with that its advantage ends. It does not give also the "most men" needed to complete the familiar aphorism. The position in itself gives no larger numbers; and when left it serves only the defensive purpose of a refuge, a base of supplies, a line of communication. It cannot be carried to the field of battle, as a reinforcement. But if you have an enemy in the Atlantic, and also one in the Pacific, and are superior to each singly, though not to both combined, central position may give an opportunity of dealing with one or the other singly and decisively; of preventing their junction in a force which you cannot meet. So, through the Russian mismanagement, Togo dealt in succession with the divisions of Port Arthur, of Vladivostok, and of the Baltic.

It may be said there is here a great deal of "if" and of "but." Quite so; and every time you tackle a concrete problem of war you will find "if" and "but" playing an enormous part. It is the "ifs" and the "buts" which constitute the dilemma of the commander-in-chief; but they also, when solved or overcome, are his title to honor. Study the "ifs" and the "buts" that hung around Napoleon before Austerlitz. They will be found in conveniently condensed form in Ropes' life of the Emperor. Remember, too, that within ten years you have yourselves witnessed just such a problem, a game played under your own eyes. Japan — Togo — had a central position, interior lines, and a force superior to either of the two enemy's divisions, that of the Baltic and that of the Far East, which lay on each

side of him. These hostile bodies were separated by a distance little inferior to that from Hampton Roads to San Francisco, by Magellan; vastly greater than that by the Panama Canal. United, the two Russian fleets would be so far superior that it may be questioned whether Togo could have faced them early in the war; if he could, it would have been through superior intrinsic efficiency not through equality of numbers. Can it be supposed that there were not plenty of "ifs" and "buts" in the months preceding the hour when he signalled his fleet, "The safety of the Empire depends upon this day's results?"

We have assurance that it was so; that from the first the Japanese through their inferiority of numbers were trammeled by the necessity of husbanding their battleships, and that the deepest anxiety, even alarm, was felt as the unexpected tenacity of Port Arthur protracted the time when the fleet before the place could be withdrawn and refitted to meet the Baltic fleet. Granting the truth of the signal when made, how vastly truer, how very doubtful the conditions, *if* the Port Arthur division had continued in the condition of the previous summer, or *if* Rozhestvensky had arrived ten months earlier. *But*, Rozhestvensky arrived too late; *but*, when he did, the Port Arthur division no longer existed.

Even so, Admiral Togo still had "ifs" and "buts" to harass him. A Japanese officer on the fleet staff wrote of the moment before Rozhestvensky's arrival:

"The time when we felt the greatest anxiety was two or three days before the battle. We had expected the Russian fleet to be sighted by our southermost vessels by May 23, or at latest 25; but no report came from them, nor did we receive from any sources any information about the Russian fleet. Now we began to doubt whether the enemy had not entered the Pacific and gone round to the Strait of Soya or Tsugaru. Being in the dark as to the route the enemy had taken, it was the most trying time for us. Even

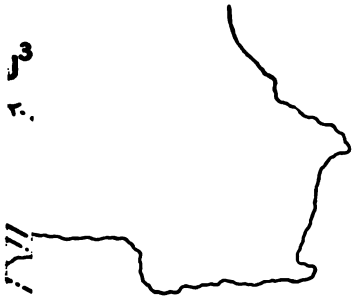
Admiral Togo, although very strong in his conviction that the enemy must come by Tsushima, seemed to have felt a certain uneasiness at that time."

Consider the "ifs" and "buts" that confronted the Archduke Charles in that campaign of 1796, which has been used as an illustration to initiate this treatment of strategy. The period of his operations coincided, broadly, with the brilliant successes of Bonaparte in his immortal campaign of that same year in Italy — successes which of themselves constituted a gigantic *if* for Austrian calculation. The Archduke's inferiority to his own two immediate opponents, Jourdan and Moreau, *if* they were united, introduced innumerable *ifs* and *buts* peculiar to himself. All these he met, and in the end overcame, by opposing concentration to dispersion; by the masterly use made of the central position assumed, and the interior lines used by him, in virtue of the strong natural advantages of the Danube. This river, and its tributaries from the south, he utilized as Bonaparte during the same season utilized the smaller river Mincio, the outlet of Lake Garda, in Italy. The Archduke turning upon Jourdan, to the north, threw a decidedly superior mass on the left flank of the general French advance, which may be considered his own right. His own left flank, south of the Danube, he refused. That is, opposing inferior numbers to Moreau on the south of the river, he instructed his subordinate in charge of that operation to dispute every stream, but not to allow himself to be drawn into a pitched battle; on the contrary, to retire continually, keeping his force substantially unimpaired. In connection with these orders, he used an illuminating expression, which illustrates emphatically that exclusiveness of purpose which Napoleon eulogized and practiced; the singleness of mind and concentration of effort by which a great commander solves his *ifs* and *buts*, by fastening tenaciously on the one thing needful.

Doubts may be many; truth is one. "It matters not," said the Archduke, "if Moreau gets to Vienna, provided I meantime crush Jourdan."

In this fine resolve we have the reply to those who would divide the battle-fleet between the Atlantic and Pacific. Had the Archduke divided his force, half against Jourdan and half against Moreau, it would have mattered greatly had Moreau reached Vienna, for, the northern Austrians also being inferior and compelled to retreat continually, Jourdan would have been on hand to join his colleague. As it was, when Moreau was nearest Vienna Jourdan was back at the Rhine in rapid retreat; and there was nothing left for Moreau but to retire precipitately, or else be cut off by an enemy superior to himself, confronting and intercepting him on his line of communications. The situation, in short, was that of Rozhestvensky, and like it entailed results unfortunate though not equally disastrous.

The issue would have been the same, even had Vienna fallen. Moscow fell in 1812, and we know the result. Napoleon, master of the center of Europe, had attempted, from his central position to act simultaneously on both flanks — Russia and Spain; and even his then gigantic power was unequal to the strain, although his instructions to Marmont show that he intended to restrict his forces in the Peninsula to a defensive rôle. There may be for us excellent reasons for stationing our fleet in the Pacific or in the Atlantic, but there is no good reason for dividing it between the two. Choose one flank or the other upon which the fleet shall act offensively, as a fleet should act, — must act; and refuse the other flank, keep it on the defensive as far as naval action is concerned. To use the Archduke's words: "It makes no matter what happens there, if the fleet crush its antagonist." You will understand, of course, that it is not meant that nothing disagreeable can happen,



EXPLANATION

- French divisions
- Austrian divisions
- Austrian Centre, on Rhine
- Austrian Left, on Rhine
- Austrian Right, on Rhine
- Jourdan, Northern French
- Moreau, Southern French
- Junction, Austrian Centre and Left
- Junction, Austrian Main Body and Right. (Jourdan begins to retreat)
- Austrian Left disputing Moreau's advance
- Simultaneous Positions of Jourdan and Moreau, August 10
- Simultaneous Positions of Jourdan and Moreau, September 9
- Austrian converging Retreats and French Advances
- Jourdan's Retreat
- Austrian Pursuit of Jourdan
- Moreau's Advance, where not coincident with Austrian Retreat
- Moreau's Retreat
- Austrian March towards South to intercept Moreau

CAMPAIGN IN GERMANY
JUNE–OCTOBER 1796

Showing French advance on two exterior lines; Austrian converging retreats to central line of Danube; Austrian concentration north of Danube against northern French; and consequent divergent retreats of both French armies.

no misfortune; it would have been excessively disagreeable to the Austrians to have Moreau reach Vienna. In 1898, the Flying Squadron was kept in Hampton Roads, mainly to assure our northern coast that nothing disagreeable should occur. Wars in which nobody gets hurt are not within our purview. In a military sense, as affecting ultimate national safety and victory, it will not matter if one coast suffer raid, blockade, bombardment, or capture, if meanwhile the enemy's fleet be destroyed. With such destruction every other loss is retrievable, *provided* the country, which is not willing to make military preparation beforehand, proves willing to endure the burden of such exertions as may be necessary to reduce to submission an invader whose communications and retreat are both cut off. An army under such conditions may exist off the country, as, for instance, Hannibal did; but there can be only one end to the wastage of men and of military supplies if severed from the sea. It may be easy to get into a country from which it will be difficult to withdraw. The sea was the security of Wellington, and more recently of the Japanese, as the loss of it was the ruin of Hannibal and of the French in Egypt, in 1798–1801, almost without further effort.

What remains of it all, therefore, is not that central position, interior lines, or concentrated force, each singly or all united, as Togo had them, confer security or certainty. The result from all is merely that they confer distinct advantage; that in an equation of force, they being added to one or the other side are not zero quantities, nor small quantities, but of great determining weight; that to overcome them, the force on the other side must be largely increased. If we assume the aggregate Russian navy to have been twenty-five per cent stronger than the Japanese, it would be decisively superior to the latter did the totals meet. Divide it in half, and each fraction is but sixty-two

and one-half per cent of the enemy, who holds a central position, and is able to move towards either by a line shorter than that which each has to cover to reach the other. On mere mathematical calculation, this signifies that in the collision the inferior fraction, in order that its own side may win, must so damage its superior enemy as to reduce him, not only to, but below, the sixty-two and one-half per cent. Whatever the ultimate result, — and some chance will enter, — it is at least doubtful whether the first fraction, so outnumbered, will inflict such damage. If it does not, and the concentrated force wins, it will have owed its success to its interior lines, its central position, and the fact that, though inferior, it was concentrated. It turns upon the second enemy with a preponderance greatly reduced from that of the first collision — reduced perhaps to terms of bare equality; but there is now present with it, and not with its new antagonist, the great moral factor which redoubles energy, which Napoleon has said dominates war, — the flush of confidence engendered by success.

CHAPTER IV

HISTORICAL ILLUSTRATIONS AND COMMENTS

(*Continued*)

AS we are about, at this point, to resume the historical narrative of the war of France under Richelieu against combined Austria and Spain, I will remind you of that which was remarked at the beginning of the preceding lecture,— namely: that the campaign of the Archduke Charles in the Danube valley illustrates the principles of concentration, of central position, and of interior lines from the side of land warfare only; that the war between France and Austria, which was afterwards considered, and which requires still some further treatment, presents a case wherein both land and sea power are involved; and that there is to follow the instance of Cromwell's naval war with the Dutch, in which illustration is confined to a naval campaign. This last is the particular subject of this present lecture.

Thus far the position of France and her contest with the House of Austria in its two branches, Germany and Spain, in the days of Richelieu and Mazarin, has been used as an historical instance, illustrative of certain principles of strategy. In the historical narrative we paused at a moment which may be defined not inaccurately as coinciding with the death of Richelieu, — in December, 1642; stopping there in order to use the instruction of the war, so far, in application to those general principles. In this application free digression to other historical examples was admitted for purposes of illustration; for it is desirable to enforce the uniformity of principles to be traced in very

diverse military conditions. It is, I think, a distinct gain for a man to realize that the military principle of concentration applies to the designing of a ship, to the composition of a fleet, or to the peace distribution of a navy, as effectually as it does to the planning of a campaign or to an order of battle.

I now resume the historical narrative from the death of Richelieu; purposing, however, to put forward only so much of an account as may serve to give the background of the course of events, and to point a military moral. After Richelieu died, the control of France passed within a brief period into the hands of Mazarin, whose general external policy was in direct continuation of that of Henry IV and Richelieu. The European conditions still were, France against the two branches of the House of Austria; but the general war, which in its beginnings resembled a confused turmoil, in which it is difficult to trace any coherence or distinctness of character, because of the multitude of events and of the cross purposes of many of the combatants, has gradually assumed more definiteness of outline. In brief, it may be said that now, allied to France are Holland, Sweden, and the north German princes; while with Spain and Austria stands Bavaria, with southern Germany in general. Beginning as a religious war, it has become chiefly political in objects. The effort of France has become more concentrated on the right flank of her enemies — her own left; that is, upon Germany, and especially upon Belgium, then called the Spanish Netherlands. In Italy she marks time, and much the same in Catalonia, where the rebellion of the inhabitants supports her. Meantime her internal troubles had been put down by Richelieu. The internal power of the state has been concentrated and strengthened, as well as her external effort. She has developed generals and is winning victories. Spain, on the contrary, has been

steadily declining in efficiency, and is embarrassed by revolt in Catalonia, as well as in Portugal, which then (1640) regained the independence of which she had been deprived by Spain in 1580. The Catalans failed to achieve the like success.

Thus France waxed stronger and stronger, Spain and the Austrian cause weaker and weaker. In 1646, the French and Swedes penetrated Bavaria, laid the country under contribution, and by this means detached it from the Austrian cause. Then the French in turn forsook their allies the Swedes, who were operating in Germany, and threw the weight of their efforts upon the Netherlands, where Holland was aiding them, but no longer very zealously. The successes of the allies caused jealousy of each other. Concentration of effort between them became impossible, for each still dreaded seeing the other become too powerful. This could not be but markedly so with Holland, confined chiefly to naval power, under conditions which made it impossible to vie with France in land force or extension of territory. Holland consequently could not see with ease the approach of the French boundary towards her own, through new acquisitions in the Netherlands.

The result was that Holland, which for some time had been lukewarm in spirit and null in action, made early in 1648 a separate peace with Spain, abandoning France; and late in the same year, in October, France and Sweden, with their allies, made the peace of Westphalia with the German Empire and Bavaria, which threw over their ally, Spain. These transactions marked the end of the Thirty Years' War. Spain refused terms, and hostilities continued between her and France alone, neither state having allies. The gain of France at this moment was consequently taken from Germany only. She obtained the country we know as Alsace, which remained hers until the Franco-German war of 1870. This advanced her border to that part of the

Rhine through a length of a hundred miles; and her hold upon the river was confirmed by the cession of two fortresses, Philipsburg and Breisach, on the German side of the stream, one at each extremity of the boundary of Alsace. It will be instructive to compare the position of these two with that of Ciudad Rodrigo and Badajoz in the Peninsular War,[1] which defined the front of operations between the British in Portugal and the French in Spain; supporting the control of the party that possessed them over the territory in their rear, as well as constituting a basis for offensive movements forward. The capture of the two in 1812 was the essential preliminary to Wellington's subsequent advance, which expelled the French from Spain.

Coincident with the Westphalia settlement, which left France and Spain at war for ten years more, a new force appeared upon the European stage. This was England under Oliver Cromwell, whose strong hand and military power imposed internal order in the state, and thus enabled him to exert on external policy the influence which the Stuart kings were never able to effect, because continually at variance with the people in Parliament. Charles I. was beheaded in January, 1649, three months after the peace of Westphalia was signed; and for nearly ten years following — that is, coincident with the continuing war between France and Spain — existed the absolute power of the English Protector. One of the first and most important steps of the new government was a reorganization of the navy, under the auspices which had made the contemporary English army a singularly efficient body. In this reconstitution of the navy there were two decisive features: 1, in place of a force in large part irregular, depending much upon merchant ships impressed as occasion demanded, was substituted a regular standing navy of vessels built especially for the state and for war; 2, the handling of this force, in disci-

[1] See map facing page 94.

pline, in tactics, and in strategy, was committed to military men, army generals and colonels, who made of it an effective military organization. The traditions of the seamen of that day did not fit them for originating such military features; they had to be imparted by men who were soldiers before they became seamen. The result was a military navy such as in the same exclusive sense had never existed before.

With this formidable weapon, which was backed by an army of equal efficiency, seasoned by a half-dozen years of war and exultant in almost constant victory, the island state looked out upon Europe, and that with no friendly eyes. An intensely Protestant republic, she saw two Roman Catholic kingdoms at war. A maritime and commercial community, she saw across the water, in Holland, a body of rivals, — Protestant, indeed, and republic, in which might be presumed a bond of sympathy; but there were old grievances unsettled and present inequalities in matters of navigation and commerce. For fifty years back, as the Dutch with English assistance had freed themselves progressively from the Spanish yoke, they had been undermining English shipping by the competition of cheaper ships and cheaper wages, until the carrying trade of England was largely in Dutch bottoms.

The motives which underlay Cromwell's policy remain obscure and disputed, because the policy itself was in many respects tortuous and deceitful. I think, however, that the secret lies in the fact that he was before all a religious man, in politics as in common life. That is, besides an unquestionable personal piety, he looked upon the course of events throughout the world as ordered by Providence, whose intentions he understood, and with whom he was to co-operate. Where a man is perfectly certain, as Cromwell was, that he and his party are possessed of the truth and of God's leading, there is danger that the conviction may induce unscru-

pulousness, conviction that the end justifies the means. The statesmanship of that day furnished no corrective. Few statesmen then got so far as to think that any justification at all as to means was needed, if the end was desirable.

Protestantism, of extreme Calvinistic type in doctrine, and in church government Independency, or, as we now say, Congregationalism, were thus identified with the will of God. To sustain Protestantism on the Continent as well as at home was to carry out that will; and it was to be done by diplomacy and by the sword, the two chief instruments of international relations. In the condition of the world the problem was military. It was one of combination and of force; while in the insular position of England, and in its highly organized army and navy, Cromwell held in his hands the balance of power, the casting vote, so long, at any rate, as the two chief Roman Catholic states were at war, as they remained throughout his life. France and Spain soon realized that between them stood a Protestant zealot, able to turn the scale.

Cromwell's first move was to attempt a political concentration of all the Protestant forces. Besides advances to other Protestant states, there was proposed to Holland coöperation; not by beggarly alliance, but by a political union of the two republics. To this Holland naturally demurred, as she at that time possessed most of the carrying trade of the world; and for the moment was easy in mind as to her dangerous neighbor, France. Besides, England's past history and present power indicated that to Holland, as the weaker partner, union would mean subjection, if not absorption. The proposition fell through; but let us not fail to note here that it was revived, and in effect accepted, forty years later, when William III., a Dutch prince, sat on the English throne. Then, the very concentration which Cromwell had attempted in vain dragged down the power

of Louis XIV. when at its height; but then also Holland fell permanently into the second place, although it was her own ruler that reigned in England and inspired the action of combined Europe.

The reply to Holland's refusal was the English Navigation Act, aimed, and aimed successfully, at Holland's supremacy in the carrying trade. This was passed in October, 1651, and in May, 1652, hostilities began. The Act probably was not the determinative cause of the war. It was only contributory; but to discuss the causes in the then entangled state of international relations is foreign to our purpose, which has to do with the course of the war, not with its origins. A two years' struggle between the republics followed; and this furnishes some apposite instruction on the subject of concentration, as well as suggests reflections upon international conditions contemporary with ourselves.

Before the time of Cromwell's government the English navy was seen in the Mediterranean only rarely and exceptionally. Merchant vessels trading there were expected to look out for themselves. What is known to us as the convoy system, though practiced to some extent in the Narrow Seas and in the Atlantic traffic with France and Spain, had not been extended to the Mediterranean. The trade there was by a chartered company, the Levant Company; and the ships for their self-protection were of a size and armament which, according to the standards of that day, made them of little use for other commerce. The Mediterranean trade of England had been among the lesser of her commercial interests, and here also the Dutch had been supplanting her, both in merchant and naval vessels. Under the first Stuart kings, that is, till the day of Cromwell's power, a vigorous foreign policy had been impossible; because to maintain it Parliament must be summoned for supplies, and would make correspondent demands for concessions, which the sovereign was unwilling to grant.

Hence the navy was insufficient in numbers, giving free scope to piracy. Barbary vessels swarmed even in English waters; one hundred and fifty English vessels had been captured by them in the six years ending with 1651. French and Spanish privateers made similarly free with English ships during the period preceding Cromwell.

The Commonwealth changed all this. To an extent never before known the State charged itself systematically with the protection of commerce by the navy. This, as Corbett points out, necessarily introduced into naval thought a new strategic idea; that, namely, of controlling commercial routes. To control a commercial route necessitates two strategic factors: (1) a mobile navy, and (2) local ports near the route, upon which the navy can rest as bases of operations. In seas where the State has no national possessions, the navy first comes and depends upon friendly harbors, as Dewey in 1898 depended on Hong Kong until war was declared; but the inconvenience and uncertainty of such dependence leads directly to acquisition of ports. The entrance of the English navy into the Mediterranean, to protect English shipping, led through a series of years and makeshifts to Gibraltar, Malta, Cyprus; ultimately to Suez, Aden, and beyond. Incidentally, England at one time occupied Tangier; at another, Corsica; and for long periods, Minorca.

Thus, when war broke out in 1652, both Dutch and English had squadrons in the Mediterranean, besides the main fleets in home waters. The English squadron made its headquarters in Leghorn, the chief port of Tuscany; the Grand Duke of which found profit and motive in the advantage to his dominion, as an emporium and center of British trade. The most part of the Dutch in the Mediterranean at the outbreak of the war were concentrated off Toulon, for reasons which even now are not known certainly. England was formally at peace with both the other

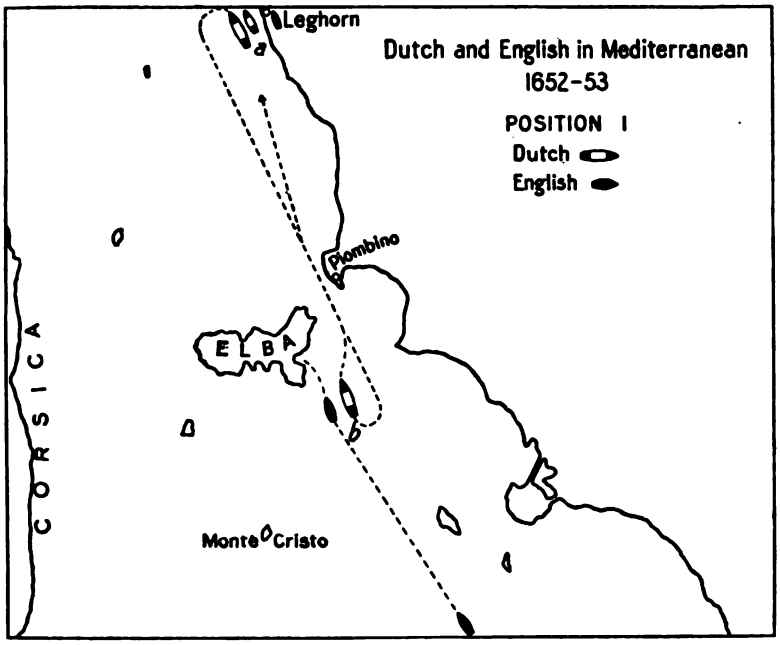
belligerents, France and Spain, but as between them Cromwell's policy at the moment inclined to Spain; a condition which caused Porto Longone, in Elba, then a Spanish possession, to be hospitable to the English. France under Mazarin's governance was less disposed than Spain then was to recognize a republic which had become such by beheading a king. But both states soon began to bid for Cromwell's support.

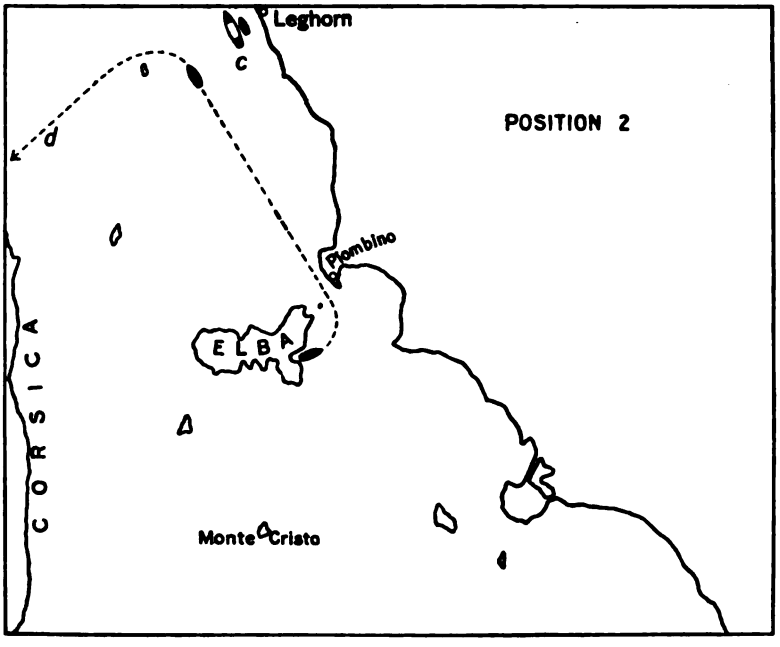
A point on which your attention should specially fasten is that under the conditions of that day the Mediterranean and the North Sea reproduced the problem with which Great Britain is to-day again confronted in them, and also that which confronts the United States in the coincident demands of the Atlantic and the Pacific. It is an interesting circumstance that we now see the British navy concentrated, up to eighty-five per cent of its battleship force, just where the English navy had to cling in the early days of Cromwell; and for the same reason, namely, the rise of a new maritime power near to the home shores. Before 1566 the provinces which now constitute Holland were simply Spanish dependencies. For the next forty years, throughout the reign of Elizabeth, they were occupied in the struggle which gave them independence, largely by the help of England, in the course of which their commercial and naval power developed. When Cromwell became Protector, Dutch merchant shipping much outnumbered that of England, while the two navies at the opening of the war may be considered substantially equal in force. These conditions, and the momentary distribution of the navies which thence resulted, had a noticeable effect upon the course of the conflict known as the First Dutch War, 1652–1654, which went on coincidently with that between France and Spain. These were not the sole factors, but they were the principal. The political constitution of the Dutch Republic, a loose confederation of provinces with

mutual jealousies, interfered with the unity of administration and organization essential to military efficiency, while at the same instant the strong military sense of Cromwell was making the English navy a military organization in spirit and in form, which it never before had been. Nevertheless, the fortunes of the war fluctuated with the observance of concentration.

When hostilities opened, the Dutch Mediterranean force was superior in the aggregate. The English, inferior in total, were also divided. One part was in Leghorn, with the officer in chief command; but the other division was far away, up the Levant on convoy business. I do not propose to give at length the movements of the several English detachments. Suffice it to say that the Dutch commander placed himself between them; first by watching, or, as this measure is commonly called, blockading Leghorn (Position 1, *a*); then by judicious movements on interior lines, by which, while he concealed his position and intentions, he maintained always a central position, a position between the two. In the result, the English Levant detachment, reinforced as the custom still was by some of the stronger merchant ships, was brought to action off Elba. (*b*) Being distinctly inferior, it was well beaten and took refuge in Porto Longone, with the loss of one ship; which, however, was recaptured afterwards in the neutral waters of Leghorn by the English ships lying there, and rejoined those at Porto Longone. This battle was on August 28, 1652.

The Dutch admiral continued to ply between the island and Leghorn, maintaining his advantage of position. The two English commanders, however, could communicate, and it was arranged that they should try to unite and fight after the Elba ships had been repaired. The home government, having become dissatisfied with the Leghorn man, had transferred command to the one in Elba, who gave careful instructions for every contingency he could foresee.


Leghorn
Dutch and English in Mediterranean
1652-53
POSITION 1
Dutch
English
Piombino
E L B A
CORSICA
Monte Cristo


Leghorn
POSITION 2
Piombino
E L B A
CORSICA
Monte Cristo

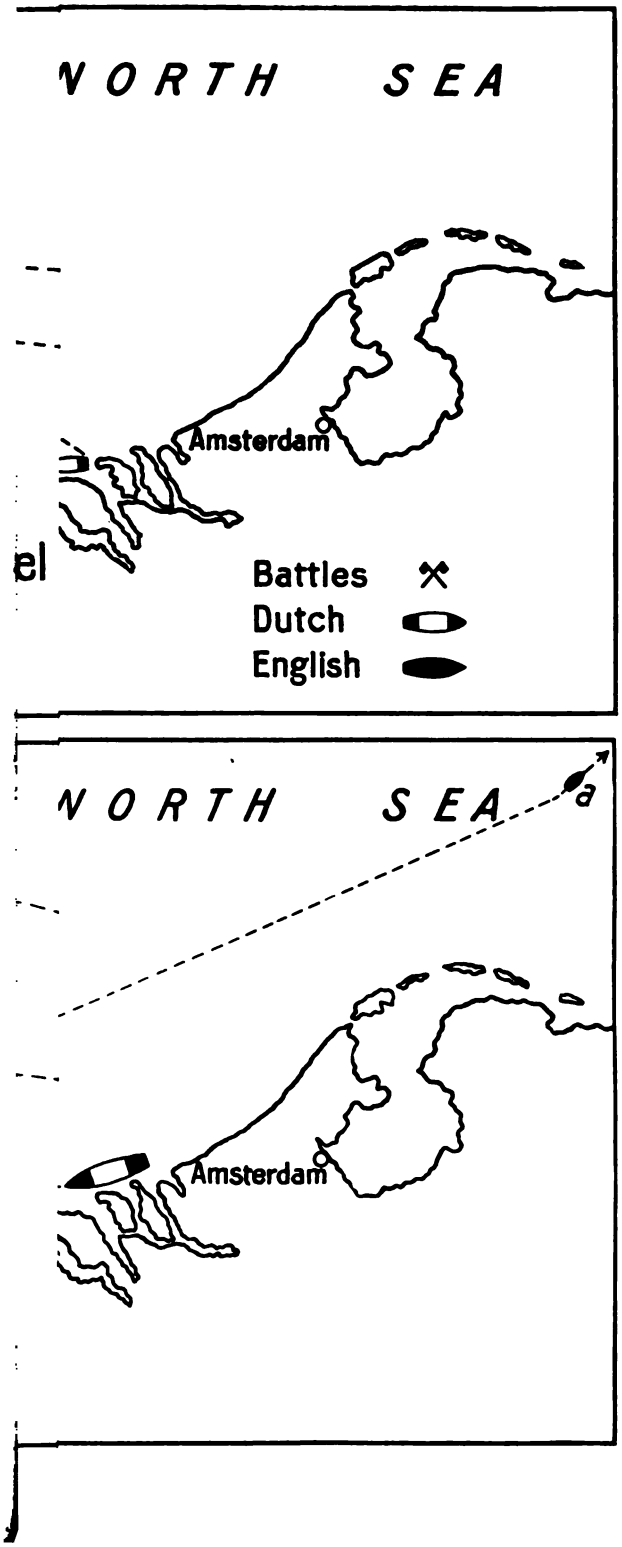
The odds, however, both of numbers and of position, were against him; as well as one of Holland's best seamen, in possession of the central position. Also, something which had not been foreseen occurred, — a chance, — the total result being that the Leghorn division was brought to action singly, beaten, and the whole save one taken. (Position 2, *c*.) This was early in March, 1653, six months after the first fight. There was then nothing left for the new commander-in-chief but to retreat with the Elba ships out of the Straits. This he did (*d*), abandoning the Mediterranean, to which the English did not return during the war.

Meanwhile, after the first of these engagements, both the English officers concerned, as well as the Commonwealth's diplomatic agent at Leghorn, had written pressing demands to the home government to send reinforcements, in order to hold the ground and sustain the honor of the flag; and this the government undertook to do. The early events of the war in the North Sea and Channel had upon the whole favored the English, who then were in greater strength; but on the one occasion when substantially equal forces met under equal conditions, off Plymouth, in August, 1652, the result had been a drawn battle as regards the fleets. (Position 1, *a*.) Indeed, as the Dutch admiral, Ruyter, succeeded on that occasion in forcing his way through with a convoy, losing neither ship of war nor merchant vessel, while the English retired into port and there remained, victory might be claimed by the Dutch. Ruyter saw his convoy clear into the Atlantic, picked up some returning merchant ships, and stood back up Channel, where he joined the main fleet, which had gone to sea under an Admiral De With. (*b*) Upon this junction followed an action with the enemy, known as the Battle of Kentish Knock, September 28, 1652. (*c*) The Dutch again were inferior in numbers, as in quality of vessels; but the re-

spective strengths, sixty-eight and sixty-four, so far approached equality as to suggest the reflection that their great superiority in the Mediterranean was dearly purchased by inferiority at the determining center of the war.

The English won a distinct victory. Encouraged by this success, and thinking it so decisive that, combined with the lateness of the season, the Dutch would not come out again in force, the English Government divided its fleet on more than one mission. (Position 2 *a*, *a*, *a*, *a*.) Among others, heed was taken of the cry from the Mediterranean; a squadron of twenty sail was detached to it, and started. The Dutch, however, had not been discouraged. They sent out a body of three hundred merchant ships, bound to the Atlantic, convoyed by seventy-three ships of war under their then greatest admiral, Tromp. The English main fleet under Blake, weakened to thirty-seven ships by the detachments, was badly defeated on November 30. (*b*) The division on its way to the Mediterranean was then recalled (*c*) and rejoined the fleet. In consequence of this disaster, the Channel was filled for some weeks with Dutch cruisers, which there was no force to check. Also, when the news reached Leghorn, the Grand Duke, who had been offended already by the violation of the neutrality of his waters, changed his policy, and insisted that he could no longer permit his ports to be used by a belligerent. This precipitated the unfortunate attempt of the Mediterranean officers to unite and fight, already narrated.

Instructed by these experiences in naval matters, the English Government, which then was thoroughly military in spirit and competent in act, concentrated their entire navy in home waters. When Tromp returned from the Atlantic with a convoy ten weeks later, in February, 1653, his seventy ships were met by eighty English, and a run-


NORTH SEA
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Dutch
English
NORTH SEA
Amsterdam

ning fight up Channel followed. (*d*) The embarrassment of the convoy was of course a further disadvantage to the Dutch admiral, additional to inferior numbers. Nevertheless, bearing in mind the English disaster of three months before, and also the fact that the Dutch under all disadvantage made here again a good fight, the result must be attributed mainly to the concentration of the English fleet. Four or five Dutch ships of war were sunk, four captured, and some thirty-five of the merchant vessels taken.

At this time General Monk, a soldier trained in the Netherlands wars and in the recent Civil War, the same who a few years later was the chief agent in the restoration of Charles II., was transferred to service afloat. He commanded a division in the fight last mentioned, February 18, 1653. Under his influence no further division was allowed of a force which, as it stood, was none too large for the work before it. The position of Great Britain relatively to the commercial approaches to Holland, whether by the Channel or the North Sea, gave her a strategic advantage over her enemy of that day precisely similar to that which by position she now enjoys over Germany. But, as has been said before, the advantage of position, however real and however great, depends upon the use made of it. The development of the German navy to-day is to be attributed, at least in part, to the recognition of this disadvantage of position, while the concentration of the British battleship force in home waters is the reflection of the German development. The measures of both countries are logical and inevitable resultants of forces — strategic, commercial, and economical — acting upon the interests of people.

The concentration of the English navy, in and after 1653, combined with the superior military organization of the fleet and the military sagacity of the government, effectually decided this war. At the end of eighteen

months the control over the approaches to Holland had put a stop to Dutch trade. Fifteen hundred Dutch ships were captured. This number, we are told, was double that of the English merchant shipping of that day — a contrast which throws light upon the jealousies between the two peoples and upon the motives of the English Navigation Act. The sources of Dutch revenue were dried up. Workshops were closed, work suspended. The Zuyder Zee became a forest of masts, the country full of beggars. Grass grew in the streets, and in Amsterdam fifteen hundred houses were untenanted. This was the result, not so much of fighting, as of strategic control of principal commercial routes.

Cromwell in 1654 granted terms of peace far easier than he might have exacted. It was not part of his policy to ruin a Protestant state. The soldier, Monk, was wroth, seeing only the immediate military end; the statesman realized that the contemporary European situation was one in which England needed a strong Holland, not an exhausted. Peace and coöperation better suited his policy, which was turning its eyes upon general external conditions in Europe and in the other continents. In the four years of life which remained to him he was to decide what advantage England and the cause of Protestantism might draw out of the then current war between France and Spain. Between these two his policy halted for some time, in a manner and to a degree which still constitutes a perplexity to historians.

Before quitting this part of our subject it seems expedient to guard myself from the appearance of a mere dogmatic insistence upon the close concentration of direct contact. Like every sound principle, concentration must be held and applied in the spirit, not in the letter only; exercised with understanding, not merely literally. The essential underlying idea is that of mutual support; that

the entire force, however distributed at the moment, is acting in such wise that each part is relieved by the others of a part of its own burden; that it also does the same for them; while the disposition in the allotted stations facilitates also timely concentration in mass. A very considerable separation in space may be consistent with such mutual support. The Japanese admirals, Togo and Kamimura, before the fall of Port Arthur were separated, and for necessary reasons; yet each supported the other by positions which were between the two principal enemies' divisions, — i. e., central. Consequently each supported its colleague by the control each exercised over its immediate opponent. The central position, too, facilitated junction or reinforcement, — transfer of force, — should such become advisable; as in the engagement of August 10, 1904, when Kamimura moved across the mouth of the Yellow Sea for a coöperation which in the result was not needed, because of the return of the Russian fleet to Port Arthur. Separations can be much wider than once they were, because steam and electricity make movement more certain and communication more quick than in old times; but such changes have in no sense affected the fundamental necessity that the several divisions should be so disposed that they support one another, and can combine by actual contact before the enemy by combination can overwhelm any one of them. This consideration, in my judgment, absolutely forbids the division of the present fleet of the United States between the two principal coasts. Such separation will be permissible only when each shall be superior to any probable enemy, as Togo was superior to the Port Arthur squadron, and Kamimura to that of Vladivostok, or when, by secure tenure of a central position, they can join in time to present a united mass.

CHAPTER V

HISTORICAL ILLUSTRATIONS AND COMMENTS
(*Concluded*)

BEFORE beginning to-day's lecture, it will be conducive to the teachings I hope from its subject to say, now, that while it incidentally offers further illustration of the strategic advantage inherent in concentration, in central position, and in interior lines, its principal lesson, the one on which I wish to lay the most stress, is the inevitableness with which the appearance of a navy on a scene of operations distant from its home country leads to the acquirement of permanent positions in such a region, and the necessity of such positions to the effectiveness of naval action.

I purpose first to pass in a rapid review, sufficient only to give you the continuous historical setting of our lessons, the events intervening between the first war between the Dutch and English, 1652–1654, and those general European wars, beginning in 1689, in which the union of the two peoples under one ruler accomplished for them the concentration of effort Cromwell had sought at first. In this intervening period there had been between them two other wars, upon which our present subject does not require us to touch. The union under a single sovereign was realized for a short period, 1688–1702, during which the Stadtholder of Holland, who also was commander-in-chief of its sea and land forces, was at the same time King William III. of Great Britain. This temporary union of the two countries effected the concentration of the two navies under a single command; a condition which the overwhelming

power of Louis XIV. rendered of vital importance throughout, but which could not have been so perfectly attained had it not been for this brief period under one sovereign. By it was facilitated the close alliance which followed his death, and which was demanded by imperious necessity. Cromwell had sought the same, and failed. He, therefore, had been forced to beat the Dutch in order to achieve his desired concentration by paralyzing a rival whom he could not command for an ally. We shall consider first the action and effect of this concentrated naval power under Cromwell; and afterwards, the action and effect of the concentration by union under one head, William III., as also, for a time, by alliance in the days of his immediate successor, Queen Anne.

Though the Dutch navy survived the war we have treated, both it and the country had suffered so severely as to have no stomach for immediate further fighting. This result, by leaving the English navy supreme over any other in Europe, was practically to concentrate naval power in Cromwell's hands, not by the alliance of Holland, but by her elimination; especially so long as Spain and France, by continuing at war, tended to a balance of sea power between themselves. Mazarin's experience of the advantageous effect of the French navy upon the communications between Spain and Italy, after Richelieu's death in 1642, had led to a development of his naval policy, such as commonly follows the entrance of a fleet upon a new scene of war. He had sought for advanced bases in the Mediterranean, by resting securely on which the scope and sweep of the French fleet would be expanded, and so the political power of France extended. First Elba and Piombino, a port in Italy over against Elba, were secured in 1646; following which Mazarin endeavored to establish in Naples a new rule, necessarily friendly to France.[1] This attempt at fur-

[1] See map facing page 94.

ther advance had only momentary success. These events, 1646–1648, were antecedent to Cromwell's power.

It was precisely the want of such local bases that at the first, after the conclusion of the Dutch war, made the appearances and the influence of the English fleet inside the Straits of Gibraltar ephemeral and transient, even under a ruler as capable and resolute as Cromwell. Great effects were produced, but they were momentary; negative, so to say, rather than positive; and, notable though they were, depended upon the simple existence of the fleet rather than upon its action. The policies of France and Spain were swayed less by what the English fleet did, than by the sense of what it might do if thrown into either scale. This is an illustration of the determining influence of armaments, even when no blood is shed; a beneficent effect, of which recent and even present conditions still afford instances. It may very well be that the silence of such action prevented Cromwell's recognizing clearly how much pressure the mere presence of the fleet exercised when Admiral Blake reached Gibraltar — then still a Spanish port — in November, 1654, six months after the peace with Holland. At that moment a French expedition had landed in Naples, to renew the attempt at detaching it from Spain. Success depended necessarily upon command of the sea, which was now the more precarious, because the internal commotions of France, known as the Fronde, had enabled Spain to regain Elba and Piombino. Blake at Gibraltar interposed between the French navy in the Mediterranean, then at Naples, and a large reinforcement on the way from Brest.

Delays of the Brest division had enabled Blake to gain this central position, Gibraltar, where he was hospitably received; because at that time, although England was not formally at war with either France or Spain, it was understood on all hands that the state of reprisals which existed against France, owing to seizures of English merchant vessels by

French cruisers, would be followed by direct attack on French ships of war, if met. Already, two years before, in 1652, such an attack had been made by Blake in the Channel upon French reinforcements proceeding to Dunkirk, with the immediate result that the port, then in French possession, was taken by the Spaniards. Now it became known at Naples that the same admiral was at Gibraltar; while the other French division was still in the Atlantic, though just where, and what its condition, was not known. Actually, it had stopped at Lisbon and made no effort to proceed. While Blake, in accordance with his orders, waited to hear about it, the fleet at Naples had time to escape to Toulon, but at the cost of abandoning its undertaking. If Blake had gone on at once he might have destroyed it; as it was, he forced it away by his mere position. There was decisive effect, though no fighting.

Corbett justly points out that such a result, which I have styled "negative," is apt to be overlooked, or at least may not arrest attention so as to affect future action. Thus, in the latest war, Port Arthur stands for a Japanese victory; few are impressed with the fact that, till it fell, it detained from the main armies in Manchuria many more Japanese than it did Russians, and obtained abundant time for the Baltic fleet to arrive. That this did not arrive within that time was not attributable to Port Arthur. In the case before us Cromwell did not note the effect exerted by Blake's presence; or, if he did, was not influenced sufficiently to turn his attention to the Mediterranean, and away from the Atlantic and America, which the traditions of Elizabeth, of Drake, and of Raleigh had constituted hitherto the chief aim of English naval ambitions.

This trend of national thought was held with the tenacious conservatism characteristic of the English, and was emphasized also by the other equally strong tradition of Protestantism combining with the northern Powers of

Europe, including France, to resist Spain and Austria, the representative political exponents of Roman Catholicism. Cromwell embodied this tendency even to fanaticism. The Mediterranean continued to him only an incident. This is regretted by Corbett, whose theme is the Mediterranean. I myself think Cromwell was right as a simple matter of policy; though I do not excuse his conduct, even allowing for the bad faith characteristic of much diplomacy of that day.

What he did was this. While Blake at Gibraltar was supporting Spain by embarrassing France, and while outwardly most friendly relations and correspondence characterized English intercourse with Spain, an expedition against the Spanish West Indies was quietly fitted out and despatched. It sailed in December, 1654, the same year that peace was concluded with Holland, at the very moment when Blake, enjoying the hospitality of Spain in Gibraltar, by his presence there compelled the French to abandon their attempt upon Naples, a Spanish dominion. In May, 1655, after failing at Santo Domingo, the West Indian expedition seized Jamaica; the English tenure of which dates from then.

Six months after this, in November, 1655, a formal peace with France put an end to the state of reprisals previously existing. Thereupon Spain declared war against England in the following February, 1656. A year later, March, 1657, came an offensive alliance between England and France against Spain. The stipulations of this were that, in return for aid by the English fleet and by six thousand English auxiliary troops, Dunkirk and Mardyke on the Straits of Dover were to be taken by France from Spain and ceded to England. The possession of these ports not only would deprive privateering of a headquarters noxious to English trade, but would give England a bridgehead for landing on the Continent, in pursuance of Cromwell's inclination to

support the Protestant cause in north Europe. These ports would take the place once filled by their neighbor, Calais. This was doubtless not satisfactory to Mazarin; but the alliance aided him in the Netherlands, where chiefly he looked for gains from Spain, and also he hoped to juggle Cromwell to the advantage of France. He met his match, however, in the Protector, who insisted that the two Flemish ports be taken; and they were placed in English possession in July, 1658, three months before Cromwell died. Spain, exhausted by this powerful combination against her, and by internal decay, came to terms with France a year later — 1659 — in a treaty known as the Peace of the Pyrenees. France received the province of Artois in the Netherlands, and Roussillon, by the eastern Pyrenees; besides other extensions of her eastern boundary, the main object of her ambition. This war of Spain with combined England and France precipitated the final decline of the Spanish monarchy, which had been progressing for some time. It marks the decisive turning point when Spain was seen evidently to have descended forever from her predominance in Europe.

The generation following Cromwell blamed him for aiding France to this immense accession of power, which helped to make her under Louis XIV. the dominant and threatening state in Europe. To treat this question fully is beyond our scope, the more so that it is hopeless to expect such a demonstration as by universal acceptance should put an end to discussion. There are *pros* and *cons*, the decision between which is a matter of temperament and prepossession rather than of pure reason. From the military standpoint it is sufficient to point out that Cromwell left England with a position consolidated at home, with a supreme fleet, an adequate army, and, through the two ports gained, with a favorable opening for intervention on the Continent, if that should be desirable. This assured her

military position for such contingencies in Europe as seemed then probable; while for the world abroad, in America and the East, the future depended upon the balance of power in Europe, especially of the fleets. For such possessions abroad European countries were the bases of operations. Decision in Europe must precede acquisition beyond seas.

In the great struggle with Louis XIV., soon to come, the English navy, no longer supreme, was reinforced by the alliance with Holland; as was also the English army. The Dutch ports also furnished then the bridgehead which Charles II. had surrendered when he gave up Dunkirk to France shortly after his restoration; and alliance with Holland was facilitated by the strong national and religious prepossessions which had induced Cromwell to concentrate English action in northern Europe, instead of in the Mediterranean, the day for action in which was not yet quite come. Then appeared the justification of his refusal to weaken Holland unduly. I think it is not too much to say that the career of William III., from the time he became king of England, justifies the policy of Cromwell; for although the immediate opponent was no longer the same, the situation was not dissimilar and the great outlines of action were closely parallel, — an army operating in the north of Europe, a fleet in the Channel or the Mediterranean, as occasion required. Cromwell's policy was based on the bed-rock of the military services as they stood when he died; not upon the course of the future Stuart kings, which he could in no wise foreknow. They, not he, fostered the power of Louis XIV.

Do I need to suggest to you that to-day again a supreme navy, an army adequate for external action, and a position consolidated in northern Europe, are the precise formulated requirements, to meet which Great Britain is striving?

and also that upon this consolidation, in home waters, depends the fortunes of her possessions abroad? with the possible exception of Canada. Interference with Canada by a foreign state the United States could scarcely see and not act. But at this moment France, Russia, and Great Britain represent the England, Holland, and Germany of William III.; and the concentration of the fleet in the North Sea reproduces the conditions under the Dutch king. To-day, however, Germany is the dreaded enemy, not France.

From the death of Cromwell to the revolution which expelled James II. from the English throne was just thirty years, 1658–1688. I pass over them without notice. The English policy of the period, international as well as military, was vitiated and paralyzed by the resolve of the two Stuart kings to maintain their personal power and to resist concessions to their people. This object required independence of Parliament, which to some extent was obtained by playing it off against Louis XIV.; but military operations require money, which only Parliament could give. Charles II. and James II. therefore maintained with the French king pecuniary and personal relations which ended in dependence upon him. Thus the aggressions of France upon Europe went on with England quiescent; though not, as to her people, indifferent. Dunkirk and Mardyke on the Channel surrendered to France, Tangier acquired in the Mediterranean, indicate a feeble and tentative change of external policy; but an effective external policy cannot exist where there is internal strife, whether between localized factions, such as the North and South of the United States fifty years ago, or between people and rulers, as in the case now before us, and, indeed, from first to last of the Stuart dynasty.

A very recent French naval writer, Commander Daveluy, says with equal truth and force:

"So long as a nation has not consolidated its unity, *all* its resources are not too much for employment upon its own territory. This is why England could not lay the foundations of her colonial empire until after her union with Scotland. This is the reason that the French navy dates from Louis XIV.[1] This is why the navy of Germany dates from the constitution of the Empire."

It is worth your while to know, and to bear in mind as a momentous political contemporary fact, that the annual expenditure upon the German navy has increased from less than ten million dollars in 1875, after the war with France, to over fifty millions in 1905; and that for the ten years succeeding the estimates are over one hundred millions yearly. It may be added that the United States did not entertain a strong navy, and reach out beyond seas, till after the question of slavery had been settled, and the period of exaggerated States Rights, as well as the *post-bellum* adjustment of the South, had been left behind. If the question with Spain, which culminated in 1898, had arisen before the War of Secession, the North as a community would have seen in war only an attempt at extending the territory of slavery by taking Cuba, knowing that to be a favorite project of Southern leaders.

This effect of internal consolidation upon external action can be strikingly, yet briefly, illustrated from the periods we have been considering. In 1622, after a feeble interregnum of twelve years, following the death of Henry IV. in 1610, Richelieu became the ruler of France. In 1624, full of his project of separating Austria and Spain by controlling north Italy and the Alpine passes, he seized and occupied the Valtellines district, east of Lake Como, through which are three principal passes to the upper Rhine and to the Inn. Upon this intervened a revolt of the Huguenots, with civil war. He had then to abandon

[1] It might be more correct to say from Richelieu, the consolidator of that nation.

the Valtellines in 1626, and to concentrate his forces within the kingdom; the siege of La Rochelle, familiar to us in Dumas' "Three Musketeers," being the salient and decisive incident, because there England threatened intervention, and there Richelieu realized that France must have a navy. In October, 1628, the fall of La Rochelle signalized the final downfall of Protestantism as a dangerous political factor in France. Within six months, Richelieu was back in Italy, and by seizing Casale, in March, 1629, controlled Piedmont against Spain. Two years later, 1631, by subsidizing Sweden, he strengthened Gustavus Adolphus against Austria. In 1633 he occupied Lorraine, and from Lorraine Alsace, intercepting Austrian and Spanish movement along the valley of the Rhine, and facilitating French invasion of Germany. In 1634, in consequence of the Swedish reverse at Nordlingen, he entered into formal alliance with Sweden and Holland, both Protestant countries, and in 1635 declared open war against Spain. In 1636, to emphasize control over the communications from Spain to north Italy, the French navy concentrated in the Mediterranean, and there continued paramount until 1655, when the English fleet under Blake entered, and the scene changed. The successive external measures indicated the progress of internal unity, which was the basis upon which Richelieu built up his great schemes of external policy.

With these actions of Richelieu began the steady progress of France towards that preponderance over all Europe which distinguished the first thirty years of the personal rule of Louis XIV. The period from the fall of Rochelle to the expulsion of James II. of England was just sixty years, 1628–1688, marked by the continuous policy of three great rulers, Richelieu, Mazarin, and Louis XIV. The only interruption was during the four years, 1649–1653, under Mazarin, when the internal outbreak known as the

Fronde again crippled external action. The really colossal growth of French power was due to several causes; but they can all be summed up under the two heads: national unity consolidated in France and hopeless division in Europe. This division was owing mainly to England remaining aloof from the interests of the Continent, through the course taken by her kings. The King of England had still power to frustrate national policy, though unable to compel action contrary to the national will. The imminent danger from the overgrown power of France was clear; but, by grace of the kings of England, adequate opposition was impossible.

In treating the final wars of Louis XIV., 1688–1713, I enter on a period upon which I lectured here twenty years ago, in the course since published under the title "Influence of Sea Power upon History." Corbett's "England in the Mediterranean" deals with the same, but his object is different. My purpose was to indicate the bearing of the navies upon the general issue of the contest; his is to emphasize the specific importance of the Mediterranean, in a conflict the chief scene of which, so far as fighting is concerned, was the eastern and northeastern frontier of France. Call the roll of battles and sieges, — Fleurus, Mons, Namur, Steinkirk, Landen, Blenheim, Ramillies, Oudenarde, Malplaquet, — and the impression produced, of vivid action chiefly in the Low Countries and on the Rhine, is true to the general facts, despite the exploits of Eugene in north Italy and of Peterborough in Spain. But, as in the wars of Napoleon, it was not chiefly in the clash of arms, but in the noiseless pressure by the navies, and largely in the Mediterranean, that the issues were decided.

Let me repeat here that the specific consideration I have in view in this lecture, and especially in what now follows, is the bearing of *permanent positions*, or, to use the technical word, bases, upon operations; and the inevitable

tendency, necessity, to proceed to the gradual acquisition of such bases as soon as national policy impels a navy to a new scene of activity. Such positions, in their permanency, differ from those which an army or navy may from time to time assume temporarily in a campaign, but resemble the permanent fortresses established on a national frontier. The considerations of central situation, of interior lines, of effect upon communications, are common to both temporary and permanent positions, and a situation useful for a permanent base may be equally so for the active operations of the field, or campaign; but the element of lasting tenure of new bases of operations introduces other considerations, of which the historical instance now to be treated furnishes illustration. The importance of the Danube, owing to the position, general course, and natural features of its bed, induced the establishment of fortified positions upon critical points; fortresses, which were local bases of operations as well as serving to control passage of the stream. So the importance of the Mediterranean, due to its situation relatively to the countries surrounding it, necessitated the acquisition of fortified ports, which were bases for the fleet, as well as afforded control over the communications of the sea. Naval base and naval station are not synonymous.

Note, first, that the Mediterranean as a whole, and specifically its western basin from the Italian peninsula to the Spanish, has been in itself, and still remains, a military *position* of transcendent importance.[1] This, in sum, is Corbett's thesis, which he expounds at large. Preponderant naval power there has determined gigantic issues, swaying the course of history; but to exert its full effect permanent bases at hand were necessary. Gibraltar, Malta, Cyprus, Egypt, and incidentally Minorca, have been results; as are the French Toulon, Algiers, Bizerta. Some

[1] See map, facing page 94.

of you may live to see German ports on the same list, and not improbably other Austrian ports besides Trieste and Fiume. Our present theme traces this development after the fall of James II. in 1688.

The crux of the political situation, and therefore of the military, was that the power of France, consolidated by Richelieu, Mazarin, and Louis XIV., had reached a degree which, coupled with her central position and resources, made her dominant over Europe. She, not England, was the subsidizer of that time. This power she was using unscrupulously for further aggression and aggrandizement. The universal danger necessitated a general alliance in mutual defense. Great Britain, Holland, Austria, Spain, and northern Italy under the House of Savoy — the entire continent west of Poland — all banded against the common enemy.

Such numbers, pressing from every quarter, were adequate to prevail in the war which began in 1689 and lasted till 1697; but coalitions are notoriously feeble, while France was strong and central. Her territorial ambitions were directed against the Spanish Netherlands and the Rhine; she wished by conquest to extend her dominions in both directions. Therefore, to operate by her left flank and left center against the allied right was her main purpose, while she would refuse her own right in Spain and Italy. That is, as I interpret her actions, her demonstrations in these two quarters were rather threats, the effect of which would be to prevent those members of the alliance against her from assisting to embarrass her principal action in the east and northeast, otherwise than by defending themselves. But this was not all. Forces small relatively to her main action would suffice for this end, as a general or admiral uses smaller numbers on the flank he refuses; but if the demonstration, the threat, was sufficient to overawe the country struck at, it might be detached from the alliance.

In such case, *all* the demonstrating force could be drawn off to the main attack in the northeast and east, as the besiegers of Port Arthur went to Manchuria after the surrender of that fortress.

It may be urged that, just because France preferred to act by her left, in the Netherlands and Germany, the allies should endeavor to force her to action on her right; and accordingly it was just here that the Mediterranean entered as a factor, as it has in later days, and as it had before. "Now again," says Ranke, "came up that condition of international policy which during the two previous centuries had especially ruled the course of politics, — the connection between Spain and the Indies with south Italy and Milan." That political connection depended on the tenure of the Mediterranean. Relatively to Spain herself and her dependencies, — Naples and Milan, — and to her present ally, Savoy, the Mediterranean was a great central position. Because the countries immediately threatened by France, Catalonia on the west and Piedmont (Savoy) on the east, bordered or touched that sea, military operations for and against were influenced decisively by control of the water.

If the coalition against France could dominate the western Mediterranean with a great fleet, its waters would become a central position from which support could be thrown to either side, to Spain or to Italy, as occasion demanded. Frequent mentions of this facility and of its bearings occur in the letters of Marlborough and of Prince Eugene, the commanders of the allied forces in the Netherlands and in Italy respectively. The maintenance of naval control, which under earlier international conditions had aided to determine the question of communications between Spain and Germany, now afforded the advantage of central position for action in two directions, — against the enemy operating in two separate quarters, Catalonia and Piedmont, unable to combine and with long and difficult communications.

Further, the Mediterranean, from its situation relatively to the extended front of the French operations, from the Netherlands to Catalonia, bore upon one flank of that line, and this the flank opposite to that on which France wished to throw the weight of her efforts. Therefore the situation, if duly utilized, facilitated pressure upon an extreme flank, a flank attack, tending to enfeeble French action in other quarters. It was this that more particularly characterized the influence of the Mediterranean in the two successive great wars, 1689–1697 and 1702–1714.

In ultimate naval strength the allied maritime states England and Holland were superior to France; but time was needed for the development of their power, and at the opening of the first war the exigencies of the situation in England, Scotland, and Ireland, owing to intestine dissensions consequent upon the expulsion of James II., necessarily detained their fleets about the British Islands. At the moment there were no English ships of war in the Mediterranean, where France then had a decisive superiority. By strong detachments from this force France for the first two years continued to have larger numbers in the Channel than the allies. At the Battle of Beachy Head, 1690, there were seventy-eight French ships to sixty enemies; but the result in the south was naval inactivity, so that the land situation remained unsupported and unaffected by the command of the sea, which it was otherwise in the power of France to utilize. Instead, further detachments passed yearly to the Atlantic, till after the Battle of La Hougue; the loss of which was partly attributable to its being precipitated before the arrival of a Toulon division. This victory, 1692, fixed the control of the Narrow Seas in the hands of the allies, establishing the communications between England and the Continent. The French fleet, to the number of seventy-one sail, returned to the Mediterranean in 1693, ready for the operations of 1694, in which

year a further body of twenty-two joined it. Not all of these, however, seem to have been available for service.

The consequence of this delay by France to exert force in the Mediterranean was that political conditions there continued unsettled. This became a perpetual source of diversion to French strength, after the allies, by recovering their communications with the Continent, were able to fix their principal land operations in the Netherlands. During the preceding years their power had been engaged principally in consolidating King William's authority in the British Islands and in establishing naval predominance in home waters. It became evident that Louis XIV. had overestimated the endurance of France, and under the resulting strain he determined now upon serious operations upon the Mediterranean littoral, which might induce Spain and Savoy to peace, releasing the French forces in those quarters for use in the Netherlands or Germany. This was the object of the sudden transfer of the fleet to Toulon, under the command of Tourville, the greatest French admiral of the day. It went to sea to support the army which on the coast of Catalonia was threatening Barcelona. At the same time, and continuously, efforts were made to detach Savoy from the Alliance.

The counter move of the allies, or rather of William III., was as evident as it proved irresistible. The main fleet, under the victor of La Hougue, followed its enemy; and, though reaching the scene late, it was not too late. To apply the familiar proverb, the French fleet had arrived first, but not with the most men; a commentary on the relative values of speed and of fighting power in ships. Being inferior, it had to retire precipitately, fortifying itself in Toulon; the operations of the French army ceased with the withdrawal of the fleet; and the appearance of the allied navies, British and Dutch, encouraged Savoy still to stand

fast, seeing the chance of a better bargain with this weight thrown into the scales.

Just here and at once arose the question of a base. At that day, and for fifty years later, it was deemed impracticable for a fleet of line-of-battle ships to dare the Bay of Biscay after October. At the beginning of the next war, in 1702, the then commander-in-chief wrote, "No service rendered by our great ships can balance the hazard of bringing them home in winter." To regain the home ports in time, the Mediterranean must be left not later than August. This would permit the enemy, having Toulon at hand, to resume operations on the coast with good prospects that year, as well as to come out the next spring before the English could arrive. Evidently the *reason* why a fleet has to quit a scene of operations is immaterial. The quitting, the displacement of the force, is the essential point. It makes no difference whether a fleet is forced to remove because of dangers of the sea or for want of coal. For each case the remedy is a local base. In the instance before us, if the British and Dutch fleet left the Mediterranean, Barcelona might fall, Spain be compelled to peace, Savoy detached by mingled threats and promises, and the whole French army in those quarters liberated to reinforce that which to all parties was the chief field of war, — the Netherlands and the Rhine.

At that time, 1694, Great Britain had no port of her own in the Mediterranean. Tangier, the gift to her from Portugal as part of a dowry at the marriage of Charles II., had been abandoned just before the death of that monarch, in 1685. The want of a permanent port meant necessarily the absence of all that a naval base involves, security and resources; for these imply previous preparation, which cannot be made till the position has been acquired. Gibraltar, obtained ten years afterward, was latent in the resolution now taken by William III., which Corbett justly

characterizes as one of the boldest, as well as of the most momentous and decisive, in naval annals. Macaulay has remarked, though not in this immediate connection, that William was not in the first rank of generals in his glance at a battle field, but that he had in the highest perfection the eye of a great statesman for all the turns of a war. He had the instinct of the strategist, and he realized that Savoy and Spain must be kept faithful, if France was not to assemble overwhelming force in the Low Countries; that the only means to retain them was the sustained influence of the allied fleet in the Mediterranean. To effect this, it must remain there, or thereabouts; so, in the face of all tradition and of the professional objections of the seamen, also without the support of the British ministry, William, a distrusted foreigner, on his own personal responsibility gave the order that the fleet should winter at Cadiz. Thus it could remain active to the last moment of the autumn operations, be at hand during the winter, and be ready to return with the first breath of spring.

It will be noted that to station thus the greater part of the allied navies in the Mediterranean, reducing to comparative insignificance the force kept in the Channel, corresponds precisely to the choice that the United States may some day be compelled to make; namely, to assemble the full power of the fleet in the Atlantic or in the Pacific, according to the nature of the danger, leaving the abandoned coast to a defensive attitude. In the contemporary discussions preliminary to the decision of William III., it is instructive to observe the appearance of those three factors, into which, as heads of specification, the requirements of a naval base will be formulated in the subsequent chapters: (1) Position, or, better, situation; (2) Strength; and (3) Resources. William's first demand was simply that the fleet should remain out. The commander-in-chief objected vigorously. There was no port; and, moreover,

if the fleet did not return, its absence laid Great Britain open to invasion. This last, again, is the argument advanced for dividing the American fleet between the Atlantic and Pacific. In this matter of a port, the English government suggested to the admiral, Naples, Messina, and Port Mahon. Naples, he replied, was undefended, that is, it lacked strength; Messina was too small; Port Mahon could not furnish provisions. In this it lacked resources, as Messina did in anchorage room. The determination upon Cadiz, while answering only partially the demand for strength and resources, gave the needed advantage of situation, and met the admiral's objection, of the exposure of the British Islands. Almost equally with Gibraltar it watched the Straits; it was central as to the detachment of the French navy at Toulon and that which remained in the Atlantic; central also for movement, either towards Toulon or the Channel. At Cadiz its communications were good; for supplies from England could be sent, supplementing adequately the resources of the port. These in other respects were sufficient; for the anchorage was abundant and secure.

In the inferiority of the French navy at this time the position at Cadiz imposed naval inaction upon Toulon; and this inaction paralyzed the French land operations in Catalonia, as well as secured the adhesion of Savoy. The British fleet remained in the Mediterranean during 1695 and again returned to Cadiz to winter. Then the hopelessness of the situation provoked Louis to a counter demonstration. He assembled a force of troops at Calais, threatening an invasion. The dread of this, renewed at later dates, 1779, 1781, 1799, 1801, and 1805, aroused a clamor which induced the retention in England of the squadron destined for Cadiz, there to replace the worn-out ships which were to return. The home fleet thus constituted was stationed in the Downs in 1696. The coincidence of the return

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of the disabled vessels with the detention of their reliefs left the squadron at Cadiz inferior in numbers and the Mediterranean open. The battle-ships of the Toulon fleet escaped to Brest, and the concentration there induced a similar local concentration of the British and Dutch fleets. This was an error, because in the total superiority of the allies it was possible for them to be in effective force in both quarters. As it was, the vessels remaining in Toulon now put out, Barcelona fell, and Savoy made peace. Popular clamor exerts an immense disturbing force upon rational military dispositions. Panic has much in common with insanity.

However, the two years' delay obtained by the British fleet remaining in position at Cadiz had completed the exhaustion of France. You may remember that the American Squadron on Lake Champlain, in 1776, commanding the water by its mere presence, so postponed the British advance that Ticonderoga remained American for that winter. In the following spring the British had assembled an overpowering naval force, the American squadron was destroyed, and Ticonderoga fell; but the delay obtained permitted the consolidation of the American forces at Saratoga, causing the failure of Burgoyne's campaign in 1777, and the consequent surrender of his army. Delay is the great gain of defense. In this way, as Mantua in 1796 defended Austria against an advance by Bonaparte, the British fleet at Cadiz defended Catalonia, Savoy, and Italy in general. It thus obtained the delay which in the outcome exhausted Louis XIV., and arrested finally the hitherto triumphal progress of France. The three instances are excellent illustrations of the strategic effect of a military position. Analogies to this will be found in the delay obtained by the prolonged resistance of the French garrison in Genoa for the full development of Bonaparte's plans in the campaign of Marengo, in 1800; in the effect of Ladysmith

upon the Boer advance in 1899; and in the resistance of Port Arthur in 1904.

Peace between France and the coalition against her was made in 1697. It is not pertinent to my present object to elaborate the occurrences of the next war, which opened in 1702. The political combination was much the same as before; save that Spain and France had become allies in the purpose of placing a Bourbon prince upon the Spanish throne, left vacant by the death of the last of the Austrian kings. This in itself made little difference, except in the Peninsula; there national feeling, as in Napoleon's day, stood by the sovereign whom the nation had chosen. In Germany, Bavaria now sided with France. Savoy at the first observed a neutrality which towards France was more than benevolent, but which was soon (October, 1703) converted into open hostility by imperious French demands. The permanent interest of this war of the Spanish Succession is that it settled the conditions in Europe, upon which depended the issues of the great colonial wars of the succeeding hundred years. The Peace of Utrecht, which ended the war in 1713, established the characteristic territorial arrangements of Europe for the century, and with them the European bases upon which rested the operations that in the end ousted France from America and the East Indies and established Great Britain in her place. This international settlement therefore corresponds to that internal consolidation which precedes national expansion.

Appreciation of the influence which pressure upon the south of France had exerted over the operations on her east and northeast frontier determined William III. to begin the new war by seizing Cadiz, now no longer allied, in order that it might serve as a base for the fleet acting in the Mediterranean. This attempt, in 1702, failed; but in 1704 the capture of Gibraltar served the same end, with

the further consequence of permanent retention by Great Britain, which could scarcely have followed with Cadiz.

Meantime, William had died; and his place, as supreme director of the general war by land and sea, was filled by Marlborough, who was in strict accord with William's views as to the Mediterranean. Briefly, although the future of the Spanish dominions was the main object of the contest, in order to frustrate the French purpose of placing a French prince upon the Spanish throne, and to support an Austrian claimant to it, Marlborough planned that the war in the Spanish Peninsula should remain a side issue, a diversion; while the allied navy, by pressure on the coast from Barcelona to Genoa, should support Savoy in closing the road by the valley of the Po to the French, to whom it offered a route alternative to the Danube valley for advance against Austria. Closing to France meant also keeping open for an Austrian army to move against Toulon. The reduction of this place was the real decisive object in the Mediterranean. It would give the allies a formidable port, a strategic position permanent for the existing war, immediately on their scene of naval operations, at the same time that the loss of it would paralyze the French navy locally; and it would remain a bridgehead for landings in southern France, the dread of which could not but detain a disproportionate number of French troops from reinforcing resistance to the allied armies in the Netherlands, or on the German frontier.

This was the broad underlying purpose of the naval campaign in 1704, in which Gibraltar fell. It failed, for reasons too complicated to detail here; but the influence of the fleet's presence upon Savoy, the pressure upon this flank of the French, contributed to favorable changes in the main theater of the war in Germany and on the upper Rhine. The maintenance of Savoy in her opposition to France depended upon support by the allied fleet, aided by

troops of the coalition. This permitted Prince Eugene, who had commanded in Italy, to make in 1704, the year after Savoy's defection from France, the junction in the valley of the Danube with Marlborough, who had marched his army from the Netherlands south for this concentration; the result being the celebrated Battle of Blenheim, which inflicted upon the French a tremendous overthrow. This victory in turn relieved for the time the pressure upon Savoy, to accomplish which was one of Marlborough's objects in undertaking his great flank march; an interesting instance of the interaction of events in war.

Marlborough and Eugene persisted in their purpose against Toulon, which culminated in a direct attempt in 1707. This again failed; but the effect of this conjoint movement of the fleets and armies of the coalition, this flank attack, had been to cause so large a concentration of French troops in that quarter as to reduce France to inaction elsewhere. After this year the French abandoned Italy. Marlborough in 1708, after the mishap of Toulon, expressed his regret that the British ministry found it difficult to keep the fleet in the Mediterranean during winter. "Until it does so stay I am much persuaded you will not succeed in Spain." The want of a base other than Gibraltar was met by the capture of Minorca in the same year. It, with Gibraltar, was ceded to England at the peace. Minorca thus was a more useful conquest than Toulon, as Gibraltar was more than worth Cadiz; just because it was possible to obtain a cession, a permanent acquisition, which could scarcely have been done with either of the continental ports.

Thus, by obtaining for England fixed naval bases, the Peace of Utrecht made the strategic position of the Mediterranean permanently tenable by the British navy, conferring the power of acting upon the coast line everywhere, with the unforeseen and unforeseeable promptness

which the mobility of naval force gives. From the particular territorial distribution of France and Spain, which entails on them commercial and military necessities on both the Atlantic and the Mediterranean, a superior navy, like that of England, by operating in the Mediterranean and towards its entrance, acts as did the Archduke on the Danube. The sea itself becomes a link, a bridge, a highway, a central position, to the navy able to occupy it in adequate force. It confers interior lines, central position, and communications militarily assured; but to hold it requires the possession of established bases, fortresses, such as those of which we have been speaking. Similarly, all these advantages followed the command of the American lakes, themselves Mediterraneans, in 1812–1814. "Without naval control of those lakes," wrote the Duke of Wellington, "successful land operations are impossible on that frontier."

CHAPTER VI

FOUNDATIONS AND PRINCIPLES

IN their first conception, these lectures were intended to comprise some outline treatment of the elements of Naval Strategy, prefatory and leading up to a discussion of the strategic features of the Caribbean Sea and Gulf of Mexico. Of this prefatory matter, the remarks on the strategic significance of the Danube, drawn from the works of the Archduke Charles, were a part; to which, for additional illustration, has been added now an exposition of the similar effect exercised upon the wars of the sixteenth and seventeenth centuries by the line of positions extending from Genoa, through Milan, to the Rhine valley, and by the Mediterranean, regarded as a military position. These illustrate, in more ways than one, the value of central position and interior lines; while the naval wars of Cromwell, also discussed, give valuable instruction on the same strategic subjects, and upon the necessity of concentration, the great factor in strategy.

When these lectures were begun, in 1887, the interest of the United States in the Caribbean and Gulf was what it had been from the days of Jefferson; that is to say, in the opening years of the nineteenth century. As the years passed, as the United States acquired Louisiana and the Floridas, as the Spanish colonial empire in America was overthrown and replaced by independent communities, with the consequent pronouncement of the Monroe Doctrine, interest increased in degree, but varied little in aim. To avert further European colonization or control entirely, and European intermeddling as far as possible, summed up

American policy. Extension of national control had for its chief motive the exclusion of European influences, by preoccupying the ground; of which preoccupation Louisiana and the Floridas afford successive instances. This tradition passed on to Cuba; it would have been impossible for the United States to acquiesce in the transfer of the island to a strong naval state. Even Jefferson regarded as desirable to include it within our schemes of national extension, averse though he was to any acquisition that might induce a naval establishment. Beyond Cuba, he said definitely, we should contemplate no advance.

The force of circumstances, however, pushed the active interests of the United States beyond Cuba to the Isthmus. This was immediately consequent upon the development of the Pacific coast, accelerated by the conquest of California from Mexico, and by the discovery there of gold. The importance of the Isthmus to a nation having possessions on both oceans was of course evident from the beginning. It had been evident to Spain, when her colonial empire was thus distributed, affecting her policy and that of her enemies; while to the United States it became clear when she too had political and commercial interests on the two coasts, and recognition of this increased in proportion as those interests developed. From that time American diplomacy, of which the Clayton-Bulwer Treaty, executed in 1851, continued in 1887 to be the most conspicuous landmark, was increasingly concerned, not only with the question of transit, but with that of positions which might affect that transit because of their influence upon the lines of communication, and especially upon that particular vital link in those communications, the Isthmus.

It will be observed that the Isthmus reproduces, in its own special way, the general condition seen in the relation of the stream of the Danube to the control of its valley; and also that of the Valtelline Passes to the Spanish com-

munications through Italy and Germany to the Netherlands, which formed the subject of the opening lectures. The Caribbean Sea reproduces the central position of the Mediterranean. This is true, even if the question be one of land transit only, as was the case in 1887, when there was no immediate prospect of a canal; and as it is at present, though the completion of the canal is now probably near. When the canal shall be finished, water communication will be consecutive, and the parallel with the other instances will be exact; control will be imperative to facility of naval action on both the national coasts. The Isthmus then will interpose as the Danube barrier did between the countries on either side; the canal will be the bridge, the tenure of which assures passage. To lose control would be to forfeit the facility for concentration in either direction, which the Danube gave to a general in Germany, and the Valtelline territory to the Spaniards of the sixteenth and seventeenth centuries. Such conditions make the Isthmus important internationally, as well as nationally important to the United States; but the interest of the United States is particular and supreme to a degree which may reasonably expect recognition from other countries.

Since these lectures were written, twenty-odd years ago, and even since their partial revision in 1897, ten years afterwards, a notable change has come over the whole prospect of American foreign relations. Up to the war with Spain, in 1898, the Clayton-Bulwer Treaty was still in force; it was not superseded until the Hay-Pauncefote Treaty of 1901. The result of the latter has been to give the United States a free hand at the Isthmus, so far as Europe was concerned; there having been in this matter no diplomatic obligations to nations other than Great Britain. The conclusion of this treaty, however, is above all notable because it was the consummation of a process that had been going on for over a half-century; marked towards its end

by considerable acrimony, owing to the strong feeling which had developed in the United States concerning its paramount interest in the Isthmus.

By a curious irony the Spanish War, which led to the triumph of the Monroe Doctrine, by the same stroke brought the United States into the concerns of the European family of nations to a degree never anticipated by our ancestors. I do not mean by this that we as yet feel ourselves affected by purely European quarrels; but I do mean that, in consequence of the Spanish War, our external relations have been so modified and extended that the relative strength of European states, what is there called the Balance of Power, may at any time, and unexpectedly, touch us closely. Therefore we are under the necessity of carefully watching the swaying of that balance, the oscillations of which are as continuous as those of a pendulum, though not as regular.

I am disposed therefore emphatically to revise, as tenable no longer, if ever, the opinion expressed in 1897, that European politics are scarcely to be considered as a part of the War College course. It is true that at the earlier date this statement was carefully qualified by the comment that the nations of Europe then were, and for some time had been, engaged in a course of colonial aggrandizement, indicative of a spirit which might bring them into collision with the American pronouncement in the Monroe Doctrine; and that therefore, as all such activities depend upon sea power, it was necessary for students of naval strategy to take note of them. But the condition now is much more acute; partly because the United States has extended so far its external activities, chiefly because the internal relations of Europe itself, and its relations to Asia, have been undergoing such a revolution as materially affects the power, and especially the relative sea power, of the several European states to intervene, should they so wish, either in opposi-

tion or in support of any particular line of policy in America or in Asia.

The external activities of Europe, noted a dozen years ago and before, have now to a certain extent been again superseded by rivalries within Europe itself. Those rivalries, however, are the result of their previous external activities, and in the last analysis they depend upon German commercial development. This has stimulated the German Empire to a prodigious naval programme, which affects the whole of Europe and may affect the United States. In 1897 I summed up two conspicuous European conditions as being the equilibrium then existing between France and Germany, with their respective allies, and the withdrawal of Great Britain from active association with the affairs of the Continent. At that date the Triple Alliance, Austria, Germany, Italy, stood against the Dual Alliance, France and Russia; Great Britain apart from both, but with elements of antagonism against Russia and France, and not against the German monarchies or Italy. These antagonisms arose wholly from conditions external to Europe, — in India against Russia, and in Africa against France. Later, the paralysis of Russia, through her defeat by Japan, and through her internal troubles, left France alone for a time; during which Germany, thus assured against land attack, was better able to devote much money to the fleet, as the protector of her growing commerce. The results have been a projected huge German navy, and a German altercation with France relative to Moroccan affairs; incidents which have aroused Great Britain to a sense of naval danger, and have propelled her to the understandings — whatever they amount to — with France and Russia, which we now know as the Triple *Entente*. In short, Great Britain has abandoned the isolation of twenty years ago, stands joined to the Dual Alliance, and it becomes a Triple *Entente*.

To the United States this means that Great Britain, once our chief opponent in matters covered by the Monroe Doctrine, but later by the logic of events drawn to recede from that opposition, so that she practically backed us against Europe in 1898, and subsequently conceded the Panama arrangement known as the Hay-Pauncefote Treaty, cannot at present count for as much as she did in naval questions throughout the world. It means to the United States and to Japan that Great Britain has too much at stake at home to side with the one or the other, granting she so wished, except as bound by treaty, which implies reciprocal obligations. Between her and Japan such specific obligations exist. They do not in the case of the United States; and the question whether the two countries are disposed to support one another, and, if so, to what extent, or what the attitude of Great Britain would be in case of difficulty between Japan and the United States, are questions directly affecting naval strategy.[1]

Great Britain does indeed for the moment hold Germany so far in check that the German Empire also can do no more than look after its European interests; but should a naval disaster befall Great Britain, leaving Germany master of the naval situation, the world would see again a predominant fleet backed by a predominant army, and that in the hands, not of a state satiated with colonial possessions, as Great Britain is, but of one whose late entry into world conditions leaves her without any such possessions at all of any great value. The habit of mind is narrow which fails to see that a navy such as Germany is now building will be efficacious for other ends than those immediately proposed. The existence of such a fleet is a constant fac-

[1] Since this was written, a new Treaty of Alliance between Great Britain and Japan, operative for ten years, has been signed — July 13, 1911. By its terms either Power will be released from its military obligation to the other, as against a third with which it may have a treaty of general arbitration, such as that framed between Great Britain and the United States.

tor in contemporary politics; the part which it shall play depending upon circumstances not always to be foreseen. Althongh the colonial ambitions of Germany are held in abeyance for the moment, the wish cannot but exist to expand her territory by foreign acquisitions, to establish external bases for the support of commercial or political interests, to build up such kindred communities as now help to constitute the British Empire, homes for emigrants, markets for industries, sources of supplies of raw materials, needed by those industries.

All such conditions and ambitions are incidents with which Strategy, comprehensively considered, has to deal. By the successive enunciations of the Monroe Doctrine the United States stands committed to the position that no particle of American soil shall pass into the hands of a non-American State other than the present possessor. No successful war between foreign states, no purchase, no exchange, no merger, such as the not impossible one of Holland with Germany, is allowed as valid cause for such transfer. This is a very large contract; the only guarantee of which is an adequate navy, however the term "adequate" be defined. Adequacy often depends not only upon existing balances of power, such, for instance, as that by which the British and German navies now affect one another, which for the moment secures the observance of the Doctrine. Account must be taken also of evident policies which threaten to disturb such balances, such as the official announcement by Germany of her purpose to create a "fleet of such strength that, even for the mightiest naval power, a war with Germany would involve such risks as to jeopardize its own supremacy." This means, at least, that Great Britain hereafter shall not venture, as in 1898, to back the United States against European interference; nor to support France in Morocco; nor to carry out as against Ger-

many her alliance with Japan. It is a matter of very distinct consequence in naval strategy that Great Britain, after years of contention with the United States, essentially opposed to the claims of the Monroe Doctrine, should at last have come to substantial coincidence with the American point of view, even though she is not committed to a formal announcement to that effect.[1] Such relations between states are primarily the concern of the statesman, a matter of international policies; but they are also among the data which the strategist, naval as well as land, has to consider, because they are among the elements which determine the constitution and size of the national fleet.

I here quote with approval a statement of the French Captain Darrieus:

"Among the complex problems to which the idea of strategy gives rise there is none more important than that of the constitution of the fleet; and every project which takes no account of the foreign relations of a great nation, nor of the material limit fixed by its resources, rests upon a weak and unstable base."

I repeat also the quotation from Von der Goltz: "We must have a *national* strategy, a *national* tactics." I cannot too entirely repudiate any casual word of mine, reflecting the tone which once was so traditional in the navy that it might be called professional, — that "political questions belong rather to the statesman than to the military man." I find these words in my old lectures, but I very soon learned better, from my best military friend, Jomini; and I believe that no printed book of mine endorses the opinion that external politics are of no professional concern to military men.

[1] Since these words were written such formal announcement has been made by a member of the British Cabinet, Sir Edward Grey, the Secretary for Foreign Affairs, on May 23, 1911. *The Mail*, May 24, 1911.

It was in accordance with this changed opinion that in 1895, and again in 1897, I summed up European conditions as I conceived them to be; pointing out that the distinguishing feature at that time was substantial equilibrium on the Continent, constituting what is called the Balance of Power; and, in connection with the calm thus resulting, an immense colonizing movement, in which substantially all the great Powers were concerned. This I indicated as worthy of the notice of naval strategists, because there were parts of the American continents which for various reasons might attract upon themselves this movement, in disregard of the Monroe Doctrine.

Since then the scene has shifted greatly, the distinctive feature of the change being the growth of Germany in industrial, commercial, and naval power, — all three; while at the same time maintaining her military pre-eminence, although that has been somewhat qualified by the improvement of the French army, just as the growth of the German navy has qualified British superiority at sea. Coincident with this German development has been the decline of Russia, owing to causes generally understood; the stationariness of France in population, while Germany has increased fifty per cent; and the very close drawing together of Germany and Austria, for reasons of much more controlling power than the mere treaty which binds them. The result is that to-day central Europe, that is, Austria and Germany, form a substantially united body, extending from water to water, from the North Sea to the Adriatic, wielding a military power against which, on the land, no combination in Europe can stand. The Balance of Power no longer exists; that is, if my estimate is correct of the conditions and dispersion which characterize the other nations relatively to this central mass.

This situation, coinciding with British trade jealousies of the new German industries, and with the German naval

programme, have forced Great Britain out of the isolation which the Balance of Power permitted her. Her *ententes* are an attempt to correct the disturbance of the balance; but, while they tend in that direction, they are not adequate to the full result desired. The balance remains uneven; and consequently European attention is concentrated upon European conditions, instead of upon the colonizing movements of twenty years ago. Germany even has formally disavowed such colonizing ambitions, by the mouth of her ambassador to the United States, confirmed by her minister of foreign affairs, although a dozen years ago they were conspicuous. Concerning these colonizing movements, indeed, it might be said that they have reached a moment of quiet, of equilibrium, while internally Europe is essentially disquieted, as various incidents have shown.

The important point to us here is the growing power of the German Empire, in which the efficiency of the State as an organic body is so greatly superior to that of Great Britain, and may prove to be to that of the United States. The two English-speaking countries have wealth vastly superior, each separately, to that of Germany; much more if acting together. But in neither is the efficiency of the Government for handling the resources comparable to that of Germany; and there is no apparent chance or recognized inducement for them to work together, as Germany and Austria now work in Europe. The consequence is that Germany may deal with each in succession much more effectively than either is now willing to consider; Europe being powerless to affect the issue so long as Austria stands by Germany, as she thoroughly understands that she has every motive to do.

It is this line of reasoning which shows the power of the German navy to be a matter of prime importance to the United States. The power to control Germany does not

exist in Europe, except in the British navy; and if social and political conditions in Great Britain develop as they now promise, the British navy will probably decline in relative strength, so that it will not venture to withstand the German on any broad lines of policy, but only in the narrowest sense of immediate British interests. Even this condition may disappear, for it seems as if the national life of Great Britain were waning at the same time that that of Germany is waxing. The truth is, Germany, by traditions of two centuries, inherits now a system of state control, not only highly developed but with a people accustomed to it, — a great element of force; and this at the time when control of the individual by the community — that is, by the state — is increasingly the note of the times. Germany has in this matter a large start. Japan has much the same.

When it is remembered that the United States, like Great Britain and like Japan, can be approached only by sea, we can scarcely fail to see that upon the sea primarily must be found our power to secure our own borders and to sustain our external policy, of which at the present moment there are two principal elements; namely, the Monroe Doctrine and the Open Door. Of the Monroe Doctrine President Taft, in his first message to Congress, has said that it has advanced sensibly towards general acceptance; and that maintenance of its positions in the future need cause less anxiety than it has in the past. Admitting this, and disregarding the fact that the respect conceded to it by Europe depends in part at least upon European rivalries modifying European ability to intervene, — a condition which may change as suddenly as has the power of Russia within the decade, — it remains obvious that the policy of the Open Door requires naval power quite as really and little less directly than the Monroe Doctrine. For the scene of the Open Door contention is the Pacific; the gate-

way to the Pacific for the United States is the Isthmus; the communications to the Isthmus are by way of the Gulf of Mexico and the Caribbean Sea. The interest of that maritime region therefore is even greater now than it was when I first undertook the strategic study of it, over twenty years ago. Its importance to the Monroe Doctrine and to general commercial interests remains, even if modified.

At the date of my first attempt to make this study of the Caribbean, and to formulate certain principles relative to Naval Strategy, there scarcely could be said to exist any defined public consciousness of European and American interest in sea power, and in the methods of its application which form the study of Strategy. The most striking illustration of this insensibility to the sea was to be found in Bismarck, who in a constructive sense was the greatest European statesman of that day. After the war with France and the acquisition of Alsace and Lorraine, he spoke of Germany as a state satiated with territorial expansion. In the matter of external policy she had reached the limits of his ambitions for her; and his mind thenceforth was set on internal development, which should harmonize the body politic and insure Germany the unity and power which he had won for her. His scheme of external relations did not stretch beyond Europe. He was then too old to change to different conceptions, although he did not neglect to follow the demand of the people as their industry and commerce developed.

The contrast between the condition of indifference to the sea which he illustrated and that which now exists is striking; and the German Empire, which owes to him above all men its modern greatness, offers the most conspicuous illustration of the change. The new great navies of the world since 1887 are the German, the Japanese, and the American. Every state in Europe is now awake to the fact that the immediate coming interests of the world,

which are therefore its own national interest, must be in the other continents. Europe in its relatively settled conditions offers really the base of operations for enterprises and decisive events, the scene of which will be in countries where political or economical backwardness must give place to advances which will be almost revolutionary in kind. This can scarcely be accomplished without unsettlements, the composing of which will depend upon force. Such force by a European state — with the single exception of Russia, and possibly, in a less degree, of Austria — can be exerted only through a navy.

Coincident with this growing sense of world conditions, and of the dependence of the future upon sea power, there has naturally gone on the development of a literature having these relations for its subject. This has been a new feature in naval affairs. By this is not meant that much, if not all, of the data with which the new literature deals had not been known and appreciated formerly. What is meant is that the attempt at systematizing is new; the effort to co-ordinate the data, to point out their significance, to elicit their teaching, and to formulate it into principles or definitions, the use of which facilitates understanding of strategic questions. The common sense of all men has early indicated some of the recognized principles of war, while the insight of superior genius has given these further developments and detected others; but, for all that, it is only of comparatively late years that these principles have been so digested and systematized, so demonstrated and established, as to form a *code* recognized by all in theory, however badly applied in practice. In the correspondence of naval men of our day and of the past, in the actions and bargains of statesmen, in naval history in general, there will be found plentiful instances of understanding the value of particular factors in themselves, and in their bearing upon interests near and remote.

Naval campaigns also, to some extent, illustrate the principles of war, though it is significant that those most interesting and most clearly stamped with military insight have been directed in their main features by men not so much seamen as soldiers. The dependence of Cromwell's navy upon the army in this respect is well known. The reorganization, even, of the fleet was intrusted to three colonels who became and were called Generals at Sea. These may be said to have recast the navy and the strategy of Drake, Hawkins, and Raleigh. The deliberate purpose was to re-model the fleet on the lines of the Commonwealth's army, then the best in Europe; and all the military movements were controlled by soldiers, of whom Robert Blake is the most eminent figure. After his death the tradition was embodied in Monk, a capable soldier and strategist.

These conditions lasted, though with modifications, to the time of William III. Under him the navy became thoroughly differentiated as a profession distinct from the army. Nevertheless, not only William, the king, but his military successor as commander-in-chief of the land forces, Marlborough, the general, formulated the strategic movements of the fleet; army and fleet together being by them recognized as integral factors, co-operating in the great combinations of the wars which were directed successively by these two eminent soldiers. The Trafalgar campaign, on the French side, was governed throughout by Napoleon; and Corbett has told us that its main lines had been evolved forty years before by a French statesman. Under the first Pitt such combinations were determined by himself; however he may have used professional advisers, the ultimate strategic decision rested with him. But in the War of American Independence, and in the Napoleonic wars, men like Rodney, St. Vincent, and Nelson had become strategists in the best sense. The management of

the British campaign before Trafalgar was eminently strategic and sound.

In the records of the wars above cited, in the correspondence connected with them, in naval history and biography, even of an early date, are to be found abundant material from which to deduce an Art of Naval War; but it is raw material, undigested, and requires working up. This abundance does not of itself give that Art, any more than any number of bricks gives us a house. It is probable that the uncertainty of the motor in the sailing-vessel largely contributed to the backwardness of the art of war as applied to the navy. It was not possible for the admiral to convert his distances into days, as the general did into so many marches. Nelson, in pursuit, beat furiously against a west wind, while two hundred miles away the fleeing Villeneuve sped by Gibraltar before an easterly gale. Land warfare knew vicissitudes enough, but there was no such perpetual disconcerting uncertainty as this. With distances thus dependent on wind and currents, strategic and even tactical combinations became uncertain to discouragement. At Trafalgar the wind made it impossible for Nelson to carry out his plan on the lines laid down, although he succeeded in preserving the essential features. The consequent indisposition to systematic study was increased by the indifference of the first navy of Europe to the military side of its profession, as compared to good seamanship.

It is to be recalled in this connection that at the time these lectures were first written there had been no naval campaign by steam fleets. The War of Secession in the United States saw no opposition of fleets; was in this one-sided, though not without fruitful instruction as to the influence of sea power. The same was true of the war between France and Germany in 1870, and that between Russia and Turkey in 1877. Since the lectures were

written there have been the conflict between China and Japan in 1894, between the United States and Spain in 1898, and that between Japan and Russia in 1904–1905. The last of these will be discussed hereafter by itself; but even with the illustration derivable from it the great preponderance of historical experience continues to rest upon sailing fleets.

Steam has introduced a relative certainty and precision into the movements of fleets. Head winds and adverse currents now answer only to the miry and mountainous road, for which allowance can be made. The turns of the screw can be counted upon better even than the legs of the soldier. An Art of Naval War becomes possible; and it becomes imperative from the very fact that the rapid, many-sided activity in the development of weapons produces a confusion in the mind which must by all means be ended, if possible. Moreover, if we clear our own heads and settle our convictions, we may produce some effect on popular understanding, which sorely needs it; as was shown by the unintelligent clamor of sensible men during the Spanish War, and the demands then made as to the distribution of the fleet. If possible, we must get hold of the principles which, throughout all changes, underlie naval war; of the strongly marked outlines around which lesser details can be filled in and to which they can be referred; by which this or that specious proposition can be judged and found to be sound or rotten, according as it fundamentally conforms to or conflicts with settled truth.

Thus when urged, as it has been and assuredly again will be, very strongly, to divide our battle-fleet fairly between our two coasts, we can point with equal assurance to the successive experiences of the Dutch and British in 1652–1654, when they so divided between the North Sea and the Mediterranean, or to that of Russia two centuries and a half later, when she divided hers between the Baltic and

Port Arthur. Or we may cite the opinion of Napoleon in the historic incident preceding Trafalgar, when Cornwallis, having an interior position and thirty-four ships, divided them impartially, as we are asked to do to-day, into two nearly equal bodies, sixteen and eighteen respectively; thus making as sure as any human foresight could, that if the enemy found either he would be in largely superior force.

[Corbett, in his "Campaign of Trafalgar," very recently published, distinctly contravenes this criticism of Napoleon, and justifies the division by which Cornwallis, having twenty-nine allied ships to deal with at Ferrol, besides twenty-one in Brest, divided his thirty-four into two bodies, eighteen before Ferrol and sixteen before Brest. He justifies, as I understand, on the ground that the Ferrol ships might go into the Mediterranean, and there control a situation which the British Government was endeavoring to mould in accordance with a coalition which was being framed with Austria and Russia.

Any difficult military situation will give rise to difference of opinion, and it will be sufficient to point out, without dogmatizing, reasons for considering that Napoleon was probably right in his judgment, and Corbett probably wrong. The allied divisions then in Ferrol had deliberately abandoned the Mediterranean three or four months before, and had gone to the West Indies. Returning, instead of seeking the Mediterranean, their easier course, they had with difficulty gone into Ferrol, where reinforcement met them. Coincidently, the French at Brest moved into the outer roadstead, under heavy batteries, to be as ready as possible to co-operate upon an approach of the Ferrol ships. Nelson, then commander-in-chief in the Mediterranean, had followed to the West Indies the Toulon and Cadiz ships now assembled in Ferrol. Not finding them in the West Indies, he returned with his fleet to the

Mediterranean; for, that being his special charge, he was obliged to provide for it, until reasonable ground was afforded for assuming its security and the necessity of taking his division elsewhere. This ground he found in the intelligence, received at Gibraltar, that the late Toulon division had certainly gone north. He consequently took his ships north and joined the fleet already before Brest. All this may be taken as showing Nelson's opinion that the danger was in the north, and that the Mediterranean for the time was safe. This general conclusion had the concurrence of Collingwood, who with a very few ships remained before Cadiz, and continued in charge of the small force of cruisers left by Nelson in the Mediterranean.

The result was that by the time Cornwallis divided his fleet into two bodies, of eighteen and sixteen, over three hundred miles apart, the twenty-nine Ferrol ships had gone to sea and had reached as far as two hundred and fifty miles west-northwest of Ferrol, where they were in a position as favorable for action in any direction as was the so-called Invisible Squadron of Rochefort, which during this critical period had been roaming the adjacent seas undiscovered. The situation, constituted by Cornwallis' division of his command, was therefore such as to make very possible that the eighteen or the sixteen might meet, unsupported, the allied twenty-nine; and, if off Brest, the possibility of co-operation by the French ships there.

The result undoubtedly would have been a creditable display of British skill and valor; possibly a brilliant victory over superior numbers. But, as Nelson said, what Great Britain needed, after two weary years of waiting, was not a brilliant victory, but the annihilation of the enemy. "Only numbers can annihilate." His other dictum, applied to the actual situation here discussed, "If Calder with eighteen gets fairly alongside their twenty seven or eight sail, by the time the enemy has beat our fleet soundly,

they will do us no more harm this year," was equally just; but it is one thing to point out the reasonable consolation of a situation and quite another to approve the action from which it has resulted. A British eighteen against an allied twenty-nine might have removed both from the board, leaving the balance just as it was; a British thirty-four against the same number would have insured annihilation. The odds, twenty-nine to eighteen, were almost the same that Nelson himself had lately anticipated for his own division, — twenty to twelve; and, while he avowed his intention to fight under such circumstances, he guarded the avowal with qualifications which indicated his opinion of the seriousness of the undertaking.]

The search for and establishment of leading principles — always few — around which considerations of detail group themselves, will tend to reduce confusion of impression to simplicity and directness of thought, with consequent facility of comprehension. It must be noted likewise that while steam has facilitated all naval movements, whether strategical or tactical, it has also brought in the element of communications to an extent which did not before exist. The communications are, perhaps, the most controlling feature of land strategy; and the dependence of steam ships upon renewing their limited supply of coal, contrasted with the independence of sailing ships as to the supply of their power of motion, is exactly equivalent to the dependence of an army upon its communications. It may be noted, too, that, taking one day with another, the wind in the long run would average the same for each of two opponents, so that in the days of sail there would be less of the inequality which results from the tenure of coaling stations, or from national nearness to the seat of war. Coal will last a little longer, perhaps, than the supplies an army can carry with it on a hurried march, but the anxiety about it is of the same character; and in the last analysis

it is food and coal, not legs and engines, which are the motive powers on either element.

The days when fleets lay becalmed are gone, it is true; but gone also are the days when, with four or five months of food and water below, they were ready to follow the enemy to the other side of the world without stopping. Nelson, in 1803–1805, had always on board three months' provisions and water, and aimed to have five months'; that is, to be independent of communications for nearly five months. If it is sought to lessen the strategic difficulty by carrying more coal, there is introduced the tactical drawback of greater draught, with consequent slower speed and more sluggish handling; or, if tonnage is not increased, then armor and guns are sacrificed, a still more important consideration. The experience of Admiral Rozhestvensky in this matter is recent and instructive. His difficulties of supply, and chiefly of coal, are known; the most striking consequence is the inconsiderate manner in which, without necessity, he stuffed his vessels with coal for the last run of barely a thousand miles. That he did this can be attributed reasonably only to the impression produced upon his mind by his coaling difficulties, for the evident consequence of this injudicious action was to put his ships in bad condition for a battle which he knew was almost inevitable.

Both the power and the difficulties due to steam call for a more comprehensive and systematic treatment of the art of war at sea, and for the establishment of definite principles upon which it reposes. To do this is simply a particular instance of the one object for which the War College exists. As the principles of the art of war are few, while embracing many features, so the principle of the War College is one; namely, the study of the art of war and the exposition of its principles. Like the body, it has but one backbone though many ribs. When these principles have been more or less

successfully defined, the way is open to a clearer comprehension of naval history, a more accurate perception of the causes of success or failure in naval campaigns. Study of these, superimposed upon an adequate grasp of principles, contributes to the naval strategist the precise gain which the practice of a profession gives to a man — a lawyer, for instance — who has already mastered the principles. Extensive study of cases gives firmer grasp, deeper understanding, wider views, increased aptitude and quickness to apprehend the critical features in any suit, as distinct from details of less relative importance.

When I was a midshipman, a very accomplished officer, the late Admiral Goldsborough, told me of his bewilderment in listening to the arguments of eminent lawyers in a difficult suit. Later in the day, meeting the judge who presided, he said to him, "Upon my word, I don't understand how you can see your way through such a maze of plausibilities as were presented by the two sides." The judge replied, "There are in such contentions a very few, perhaps only one or two, really decisive considerations of fact or principle. Keeping those firmly in mind, much of the argument sheds off, as irrelevant, or immaterial, and judgment is therefore easy." This is the advantage of the habit of mind bred by study, when principles are understood. Such decisive considerations correspond essentially to the leading feature, or features, which constitute "the key" of a military situation.[1] A mass of confusing in-

[1] Clausewitz pokes some mild fun at the expression "the key" of a military theater, or situation; which probably does come too easily to the lips, or to the pen, as if in itself conveying an encyclopædia of explanation. The analogies of the use of the word in other relations, however, justify its application to military conditions. In the judgment of the writer, the use of it has the special advantage of conducing to sustain the desirable impression that in most military situations, or problems, there is some one leading feature, so far primary, that, amid many important details, it affords a central idea upon which concentration of purpose and dispositions may fasten, and so obtain unity of design.

cidents group themselves around certain decisive considerations, by holding which firmly you not only understand more easily the determining factors in a particular case, but are fitting yourself more and more to judge any military case put before you; and that, too, with the rapidity for which military urgency often calls.

Here is seen the value of land warfare to the naval student. In the first place, land warfare has a much more extensive narrative development, because there has been very much more land fighting than sea; and also, perhaps because of this larger amount of material, much more effort has been made to elicit the underlying principles by formal analysis. Further, with the going of uncertainty and the coming of certainty into the motive power, a chief distinction between the movements of fleets and armies has disappeared. Unless, therefore, one is prepared to discard as useless what our predecessors have learned, it is in the study of the best military writers that we shall find the most ample foundations on which to build the new structure. Not attempting the vain, because useless, labor of starting on unbroken ground, we will accept what is already done as clear gain, and build. No doubt — and no fear — but we shall find differences enough; no one will mistake the new house for the old when it is finished; yet the two will have a strong resemblance, and the most marked contrasts will but bring out more clearly than ever the strong features common to both.

The definitions of strategy, as usually given, confine the application of the word to military combinations, which embrace one or more fields of operations, either wholly distinct or mutually dependent, but always regarded as actual or immediate scenes of war. However this may be on shore, a French writer is unquestionably right in pointing out that such a definition is too narrow for naval strategy.

"This," he says, "differs from military strategy, in that it

is as necessary in peace as in war. Indeed, in peace it may gain its most decisive victories by occupying in a country, either by purchase or treaty, excellent positions which would perhaps hardly be got in war. It learns to profit by all opportunities of settling on some chosen point of a coast, and to render definitive an occupation which at first was only transient."

This particular differentiation of naval strategy is due to the unsettled or politically weak conditions of the regions to which navies give access, which armies can reach only by means of navies, and in which the operations of an army, if attempted, depend upon control of the sea. If a nation wishes to exert political influence in such unsettled regions it must possess bases suitably situated; and the needs of commerce in peace times often dictate the necessity of such possessions, which are acquired, as the French writer says, when opportunity offers.

In Europe, the great armies now prevent such acquisitions, except at the cost of war; although it is perhaps a little difficult to maintain this statement in the face of the recent annexation of Bosnia and Herzegovina. In truth, however, southeastern Europe, owing to the weakness of Turkey, brings to the back door of Europe just that sort of condition which for the most part is to be found only in the remoter regions which navies reach; while the political upset in Turkey gave the opportunity, and the pretext, for Austria to act, — to consolidate her power in a strategic position, which, to say the least, advances her towards the Ægean, a goal desirable for her commercial future. Thus, also, passing over more ancient historical instances, England within ten years of peace occupied Cyprus and Egypt under terms and conditions on their face transient; but which in the former case have led to a formal cession, and in the latter, after over a quarter of a century, have not yet ended in an evacuation of the country. She there still

holds the possession which is nine points of the law, despite the long continued, but at last apparently appeased, discontent of France and Russia.

Similarly, in later years, France has possessed herself of the territory of Tunis and of its port Bizerta, the possibilities of which as a naval station are highly spoken of, and appear to be superior to those of Algiers in important hydrographical particulars, as well as in nearness to a narrow part of the Mediterranean; in closeness, that is, to the necessary line of communication between the Straits of Gibraltar and the Suez Canal, the critical link in the European route to the Far East, to India, and to Australia. Again, there is the German position of Kiao-Chau, concerning the concession of which by China the Chancellor of the German Empire said at the time that the need of a base in the Far East, for both commercial and political — that is, naval — reasons, had long been foreseen. Consequently upon opportune occasion it had been acquired by pressure upon China. The Caroline and other Pacific Islands purchased by Germany since these lectures were first written are illustrations of the same truth, stated by the French writer quoted, that "Naval Strategy has for its end to found, support, and increase, *as well in peace as in war*, the sea power of a country." I doubt, indeed, whether the same is not true of land strategy; but the positions in which it is interested — the scenes of land warfare — are so well understood, and so firmly held by long prescriptive right, that they cannot ordinarily be transferred, except at the cost of war. The diplomatist, as a rule, only affixes the seal of treaty to the work done by the successful soldier. It is not so with a large proportion of strategic points upon the sea. The above positions have all been acquired in peace, and without hostilities. The same is true of the acquisition of the Hawaiian Islands by the United States, accomplished long after the writing of

these lectures. Such possessions are obtained so often without actual war, because the first owners on account of weakness are not able to make the resistance which constitutes war; or, for the same reason of weakness, feel the need of political connection with a powerful naval state.

Closely associated with this point of view, which depends upon the usual remoteness of the positions thus acquired from the country acquiring them, is the very large geographical scale upon which naval operations are conducted as compared with those on land. This was an aspect which struck the late General Sherman, when he did me the favor to read the original draft of these lectures. Bases coincident with the whole seacoast of a country, lines of communication hundreds of miles long, leading to objectives equally remote, movements at the rate of hundreds of miles in a day, impressed the imagination which had conceived and effected the noted March to the Sea.

Another illustration of naval strategy in time of peace, which also depends in large measure upon the great distances which separate the strategic centers of interest, — centers, for example, such as those of the Atlantic and Pacific coasts of the United States, or those of Great Britain in the Narrow Seas and in the Mediterranean, — is to be seen in the changed disposition of navies at the present time. It would be interesting to estimate how much this is due to circumstances, to changes in international conditions, and how much to the greater attention to and comprehension of the principles and requirements of strategy, now to be found in naval officers, as compared with the placid acquiescence of former generations in routine traditions. I think it would be safe to say in this connection that the present recognition of the necessity for concentration is an advance due to study, to intellectual appreciation of a principle and of the military

ineptness and danger of the former method of distributing the force of a nation in many quarters during peace; but that the particular methods in which this appreciation has shown itself are the result of international conditions. As an instance may be cited the present concentration of the British fleet in home waters. This is an immediate reflection of German naval development. A corollary to this change in the distribution of the fleet is the enhanced importance of the Chatham dockyard and the initiation of a new base at Rosyth. Both are illustrations of strategic positions established or developed in peace.

Another instance, of more value for an analysis, is the concentration of the United States battle-fleet in one command and one body. This illustrates the effect of the simple principle upon the minds of those who direct the navy, and also has a particular indicative value; for international relations have not as yet compelled that concentration to be localized, either in the Atlantic or Pacific, as that of Great Britain has been in home waters. The concentration is due to a simple recognition of principle, not to pressure of circumstances. It is known in the navy, however, that the recognition was first made in the process of war games at this College. That this concentration at present is in the Atlantic is merely the continuance of a tradition that our chief danger is from Europe, as for a long time was the case. This may be true now, or it may not; circumstances, that is, the developments of international relations, will determine from time to time the place of concentration, as it has for Great Britain. In connection with this line of thought, let it be noted that in the round-the-world cruise of the battle-fleet, a conspicuous matter for observation was the disappearance of the small squadrons and scattered vessels which once testified the general naval policy of governments.

The necessity for such sustained naval concentrations

depends again upon the characteristic which above all differentiates naval strategy from that upon land. This characteristic is the mobility of navies as compared with armies, the outcome of the very different surfaces over which they respectively move. A properly disposed fleet is capable of movement to a required strategic position with a rapidity to which nothing on land compares. This necessitates a corresponding preparation on the other side, which at the least must be ready to get there equally rapidly and equally concentrated. All this is mobilization; a process common to land and sea, but differing both in the scale and in the rapidity with which it can be conducted. At sea, for navies, the process also is simple; which again means that it can be rapid. Complication means loss of time. For these reasons, while the disposition of armies in peace must be maintained with direct reference to war, the difficulty of mobilization for the other party permits a dispersion of the forces on land which is impolitic in naval dispositions. In the mobilization of a land force, concentration, militarily understood, is the prime object, as it is with navies; but it is the second step, that is, it follows the local activities which mobilize the several corps. With navies it should be less the first step than the condition at the instant war breaks out, however unexpected. Then again the impedimenta, the train, which constitutes so large a factor in military movements, exists for navies only in a very modified degree; and the train possesses substantially the same mobility as the battleships themselves, because the open field of the sea offers wider facilities than roads can do. All these advantages in mobility mean rapidity in time; and this reduction in the scale of time required for movement means expansion in the scale of distance that can be covered, in order to overpower a dispersed or an unwary enemy. Thus when the Japanese torpedo vessels surprised the

unready Russian fleet before Port Arthur, they opened hostilities some hundreds of miles from their point of departure.

"The possession of the strategic points," says the Archduke Charles, "decides the success of the operations of war." This Napoleon also expressed in the words, "War is a business of positions." It is necessary, however, to guard against a mistake so common that it seems almost to be a permanent bias of the human mind in naval matters. It is one that has come home to myself gradually and forcibly throughout my reading; a result which illustrates aptly what I have just said of the gain by reading widely after principles are understood. I knew long ago, and quoted in these lectures, Jomini's assertion that it is possible to hold too many strategic points; but it is only by subsequent reading that I have come to appreciate how common is the opinion that the holding of each additional port adds to naval strength. Naval strength involves, unquestionably, the possession of strategic points, but its greatest constituent is the mobile navy. If having many ports tempts you to scatter your force among them, they are worse than useless. To this is to be added another remark, also due to Jomini, that if you cannot hope to control the whole field, it is an advantage to hold such points as give you control of the greater part of it. The farther toward an enemy you advance your tenable position by the acquisition of strategic points, or by the positions occupied in force by army or navy, the better; provided, in so doing, you do not so lengthen your lines of communication as to endanger your forces in the advanced positions.

An exceptionally strong illustration of the benefit of such advanced position is afforded by the Island of Cuba and the effect exercised upon the control of the Gulf of Mexico, according as a position in that island may be held or not by the United States. While Cuba was Spanish,

the United States had to depend upon Pensacola and the Mississippi as points upon which to base naval operations. If, in such conditions, war arose with a European state, Cuba being neutral, the enemy venturing his battle-fleet into the Gulf of Mexico would not thereby expose his rear or his communications to attack in force to the same extent that he would now with the United States cruisers based upon Guantanamo, duly fortified. Between opponents of equal force this advanced position gives a decided advantage to the occupant by the facility it affords to molest and interrupt the supplies, and especially the coal supplies, of a hostile fleet attempting to maintain itself within the Gulf, or advanced in the Caribbean towards the Isthmus. As regards the Gulf coast alone, Key West to some extent would fulfil the office of Guantanamo. The two together are a better defence for our Gulf region as a whole than localized land defences at particular points of the region would be. As regards influence over the Canal Zone, the superiority in situation of Guantanamo over Key West is obvious. The deterrent effect of such positions upon a fleet does not apply to the same degree to single fast cruisers or small squadrons, because the loss of a few of them can be risked for the sake of annoying an enemy.

The supreme naval instance of an advanced position in former times was the British blockade of French ports, by which the safety of British commerce was assured and the invasion in force of the British Islands prevented. A closely analogous disposition is the present concentration of the British battle-fleet in the home waters, having in view, as is well understood, immediate effective concentration against Germany in the North Sea. In case of war, whatever particular measures may be then adopted, the presence there of a fleet decisively superior to the German covers effectively all British lines of communication from the Atlantic; that is, practically with the entire world,

with a possible exception of the Baltic countries. The same disposition intercepts all German sea communications except with the Baltic. It also covers the British Islands against an invasion in force.

From these instances the general reason for taking up such an advanced position is obvious. Behind your fleets, thus resting on secure positions and closely knit to the home country by well-guarded communications, the operations of commerce, transport, and supply can go on freely. Into such a sea the enemy cannot venture in force about equal to your own, — Germany, in the instance just cited, into the Atlantic, or an enemy of the United States into the Gulf, — because in the very act of venturing he exposes his communications, and, in case of reverse, he is too far away from his home ports. Cuba thus covers the Gulf of Mexico, but would not have an equal material effect upon operations against the North Atlantic Coast. The British blockades of a century ago, on the contrary, being pushed right up to the French shores, covered the entire ocean and all approaches to the British Islands, because so far advanced. In virtue of that advance, while maintained, they conferred upon the home country perfect security from invasion with substantial immunity to the commerce of the United Kingdom, the loss being less than three per cent per annum.

To-day, the British Islands by their geographical situation alone, as towards Germany, themselves occupy an advanced position; their control over the North Sea resembles closely that of Cuba over the Gulf of Mexico, and their defensive value to the communications of the country are the same. Even German cruisers, — commerce destroyers, — to reach the British commercial communications, must run the gauntlet of the North Sea, and act with diminished coal supply far from their bases of operation. The rear and its communications cannot, we know, be protected

wholly from commerce destroyers in their attacks either upon supply ships or commerce. Such raids on the flanks and rear of an army were frequent in the American War of Secession. They can only be checked, not wholly prevented, by light bodies, or by cruisers similar to those who make them.

"Good partisan troops," says Jomini, whose experiences antedated the American War of Secession by half a century, "will always disturb convoys, whatever be the direction of the roads, even were that direction a perpendicular from the center of the base to the center of the front of operations — the case in which they are least open to the attacks of an enemy."

Such injuries, however, are not usually to be confounded with the cutting, or even threatening, the communications. They are the slight wounds of a campaign, not mortal blows; vexatious, not serious. It is a very different matter to have a powerful fleet in a strong port close to the communications.

Raiding operations against commerce, or against an enemy's communications, may proceed from remote colonial positions. In former wars the French West India Islands, Martinique and Guadeloupe, thus served as bases for French cruisers against British commerce and supply vessels. Provision against these raids did not then, and cannot now, depend directly upon the distant home country. They must be met by local dispositions. Such positions themselves illustrate particular cases of advanced positions, exercising a specific, if limited, control. For instance, German Southwest Africa, as far as situation goes, has facilities for molesting British intercourse with the Cape of Good Hope, or beyond by that route. To meet such a condition provision likewise must be local. The effect of the British concentration in the North Sea is in such cases indirect, though real. It imposes the question how far such detachments, made before war, would be consistent with the general scheme of German North Sea operations; with the

further problem how far the detachments could be sustained in efficiency, in face of the difficulty of passing supplies through the lines of British cruisers in the North Sea and Channel.

A distinct and great reinforcement to the effect of a line of advanced positions is that it be continuous by land, and extensive. Thus the ports of Cuba have value additional to their individual advantages, from the fact that they not only are connected by land, but that this land barrier is nine hundred miles long, a troublesome obstacle to an enemy. In the same way, the effect of the British Islands upon North Sea commerce is increased by the continuousness of the land from the Straits of Dover to the north end of Scotland.

The determination, therefore, of the strategic points of a maritime area, such as the Gulf and Caribbean, or as the Pacific, the two seas in which the United States is most critically interested, must be followed by a selection from among them, first, of those which have the most decisive effect upon the control of the theater of war; secondly, of those which represent the most advanced position which the United States, in case war unhappily arose, could occupy firmly, linked to it by intermediate positions or lines, such that the whole would form a well-knit, compact system from which she could not be dislodged by any but a greatly superior force.

CHAPTER VII

FOUNDATIONS AND PRINCIPLES

(Continued)

1. Strategic Positions

THE strategic value of any place depends upon three principal conditions:

1. Its position, or more exactly its situation. A place may have great strength, but be so situated with regard to the strategic lines as not to be worth occupying.

2. Its military strength, offensive and defensive. A place may be well situated and have large resources and yet possess little strategic value, because weak. It may, on the other hand, while not naturally strong, be given artificial strength for defense. The word "fortify" means simply to make strong.

3. The resources, of the place itself and of the surrounding country. It is needless to explain the advantages of copious resource or the disadvantages of the reverse. A conspicuous example of a place strong both for offense and defense, and admirably situated, yet without natural resources, is Gibraltar. The maintenance of this advanced post of Great Britain depended in the past wholly upon her control of the sea. Resources that are wanting naturally may be supplied artificially, and to a greater extent now than formerly. Malta and Minorca illustrate the same truth but to a less degree, and generally, in sea strategic points, the smaller the surrounding friendly territory, the fewer the resources and the less the strength. In 1798–1800 the French garrison at Valetta

was cut off from the resources of the island of Malta by the revolt of the islanders, supported by the British; and being rigidly blockaded by sea, its resistance was ended by exhaustion. From these considerations it follows that, other things being equal, a small island is of less strategic value than a large one; and a point like Key West, at the end of a long narrow peninsula of restricted access, is in so far inferior to Pensacola, and would be to Havana or Cienfuegos if Cuba were a thriving country.

As an illustration of the advantage of a large island over a small, or over several small ones, I will read you the opinion of the well-known Admiral Rodney, found in an official memorandum of the period of the War of American Independence. Rodney had had a very long experience of the West Indies, both in peace and war.

"Porto Rico, in the hands of Great Britain, will be of infinite consequence, and of more value than all the Caribbee Islands united — will be easily defended, and with less expense than those islands; the defense of which divides the forces, and renders them an easier conquest to an active enemy: but this island will be such a check to both France and Spain, as will make their island of St. Domingo be in perpetual danger, and, in the hands of Great Britain, enable her to cut off all supplies from Europe bound to St. Domingo, Mexico, Cuba, or the Spanish Main; and, if peopled with British subjects, afford a speedy succour to Jamaica; and, when cultivated, employ more ships and seamen than all the Windward Islands united."

In this you have an example of the material which, as I have said before, naval history furnishes in abundance to the student of the art of war. All the advantages of a strategic point are here noted, though not quite in the orderly, systematic manner at which a treatise on the art of war would aim: Situation, relatively to Jamaica, Santo Domingo and other Spanish possessions; defensive strength, due to concentration, as compared with the dispersion of Lesser Antilles; offensive strength as against the com-

munications of Spain with her colonies; and resources of numerous British subjects with their occupations, as well as of British ships and seamen.

Where all three conditions, situation, intrinsic strength, and abundant resources, are found in the same place, it becomes of great consequence strategically and may be of the very first importance, though not always. For it must be remarked that there are other considerations, lesser in the purely military point of view, which enhance the consequence of a seaport even strategically; such as its being a great mart of trade, a blow to which would cripple the prosperity of the country; or the capital, the fall of which has a political effect additional to its importance otherwise.

Of the three principal conditions, the first, situation, is the most indispensable; because strength and resources can be artificially supplied or increased, but it passes the power of man to change the situation of a port which lies outside the limits of strategic effect.

Generally, value of situation depends upon nearness to a sea route; to those lines of trade which, when drawn upon the ocean common, are as imaginary as the parallels of the chart, yet as really and usefully exist. If the position be on two routes at the same time, that is, near the crossing, the value is enhanced. A cross-roads is essentially a central position, facilitating action in as many directions as there are roads. Those familiar with works on the art of land war will recognize the analogies. The value becomes yet more marked if, by the lay of the land, the road to be followed becomes very narrow; as at the Straits of Gibraltar, the English Channel, and in a less degree the Florida Strait. Perhaps narrowing should be applied to every inlet of the sea, by which trade enters into and is distributed over a great extent of country; such as the mouth of the Mississippi, of the Dutch and German rivers, New York harbor, etc. As regards the sea, however, harbors

or the mouths of rivers are usually *termini* or *entrepôts*, at which goods are transshipped before going farther. If the road be narrowed to a mere canal, or to the mouth of a river, the point to which vessels must come is reduced almost to the geometrical definition of a point and nearby positions have great command. Suez presents this condition now, and Panama soon will.

Analogously, positions in narrow seas are more important than those in the great ocean, because it is less possible to avoid them by a circuit. If these seas are not merely the ends — "*termini*" — of travel but "highways," parts of a continuous route; that is, if commerce not only comes to them but passes through to other fields beyond, the number of passing ships is increased and thereby the strategic value of the controlling points. It may, perhaps, be well to illustrate here, by the instance of the Mediterranean, the meaning I attach to the words "*termini*" and "highways." Before the cutting of the Suez Canal, the Levant and Isthmus were *termini*. Ships could not pass; nor goods, except by transshipment. Since the canal, the Levant has become a point on a highway and its sea is a highway of trade, not a *terminus* only. The same remarks apply, of course, to the American Isthmus and any future canal there. If Bermuda be compared with Gibraltar, or even with Malta, as to position only, the advantage of these will be seen at once and the argument concerning narrow seas illustrated; for shipping must pass close by them, while Bermuda, advantageous though it is, regarded as a depot, and favorably situated for offensive operations against usual trade routes, may be avoided by a circuit, involving inconvenience and delay, but still possible.

A radical difference underlying the conditions of land and sea strategy is to be found in the fact that the land is by nature full of obstacles, the removing or overcoming of

which by men's hands opens communications or roads. By nature, the land is almost all obstacle, the sea almost all open plain. The roads which can be followed by an army are therefore of limited number, and are generally known, as well as their respective advantages; whereas at sea the paths by which a ship can pass from one point to another are innumerable, especially if a steamer, content to make a circuit. The condition of winds, currents, etc., certainly do combine with shortness of distance to tie ships down to certain general lines, but within these lines there is great scope for ingenuity in dodging the search of an enemy. Thus Rodney, in a despatch to the Admiralty concerning a homeward-bound convoy from the West Indies, states that, instead of going direct, it will proceed so as to reach the latitude of the English Channel at least six hundred miles west of it, and thence steer due east, thus deceiving the enemy as to its position, as well as enabling the Admiralty with certainty to reinforce the protecting ships. On a later occasion he wrote, "I have given the commanding officer the strictest orders on no account to attempt the Channel, but to gain the latitude of Cape Clear at least nine hundred miles west of that cape and thence proceed." So Napoleon in one of his condensed phrases said that the determining elements in naval operations were "*Fausses routes et moments perdus.*"

A very pertinent historical instance was in the pursuit of Bonaparte's Egyptian expedition by Nelson in 1798. The French commander-in-chief, after leaving Malta, laid his course first for Crete, instead of towards Egypt. Nelson, satisfied as to the enemy's destination, naturally and properly pushed direct for Egypt. Unluckily, he had not a single frigate for lookout service. His track consequently diverged from that of the French, and he lost them; the wake of the two fleets actually crossed on the same night, but a light haze hid them from each other.

Such conditions made it necessary for Great Britain during the great wars to keep a close lookout, if not a blockade, at the entrance of the French harbors, which thus became strategic points; for if the fleet within once got away and was lost to sight, nothing was left to the British commander but to reason out as well as he could their probable line of action.

An interesting illustration of the essential similarity of conditions, under all the qualifications introduced by modern development, is to be found in comparing the perplexities of Admiral Togo in 1905 with those of Nelson in 1798. Nelson did not *know* whither the French were bound; he depended upon inference, deduced from indications and from existing political conditions. Togo did not *know* what the Russians might attempt, whether fight or flee, though their ultimate destination could be only Vladivostok; but as to the route they would take he had to depend upon inference, in which known weather conditions played a large part. Both admirals calculated rightly; but both underwent intervals of anxious suspense, because of want of information. "Even Admiral Togo," wrote one of his staff, "certain as he had felt that the enemy must go by way of Tsushima, began to be anxious as the days of their expected arrival passed without their appearing." Allowing for what wireless does, it may be said without exaggeration that Togo did not learn where the enemy was and what he was doing any sooner than Nelson did; that is, till he was seen by the Japanese scouts. He had lost touch, or rather never had gained it other than by means of common report, unofficially; not by his own vessels. Like Nelson at the Nile, Togo had no certainty before the enemy was seen; in the one case from a masthead of a battleship, in the other by a lookout vessel only a hundred miles distant from the flagship. Both dilemmas arose from failure to watch the enemy in his port of departure or at

some unavoidable point of passage. Whether any blame attaches for this failure is another question; the inconvenience was due to scouting not having been pushed far enough forward.

For the reason that the open ocean offers such large opportunity for avoiding a position recognized as dangerous, first-rate strategic points will be fewer within a given area on sea than on land, — a truth which naturally heightens the strategic value of such as do exist. For instance, Hawaii, in the general scheme of the Pacific, is a strategic point of singular importance. It is a great center of movement, an invaluable half-way house, an advanced position of great natural power of offense as a base of operations and for supply and repair; but in the control of commerce its effect is lessened by the wide sweep open to vessels wishing to avoid it. On the other hand, possession gives it defensive value additional to offensive, by excluding an enemy from using it, whether for war or for commerce. The sea, indeed, realizes a supposed case of the Archduke Charles. He says,

"In open countries, which are everywhere practicable, and in which the enemy can move without obstacle in every direction, there are either no strategic points or there are but few; on the contrary, many are to be met in broken countries, where nature has irrevocably traced the roads which must be followed."

As a ship goes from Europe to Central America she passes first through a wholly open country until she reaches the West Indies; there she enters one that is broken, and abounding in strategic points of greater or less value.

The *amount of trade* that passes enters into the question as well as the *nearness of the port* to the route. Whatever affects either affects the value of the position. It is the immense increase of German industry, commerce, and

shipping that has made Great Britain, by the strategic position of the British Islands, the menacing object she has become in German eyes. The growth of German trade, combined with the strategic position of Great Britain, has revolutionized the international relations of Europe. A similar new commercial condition, the Panama Canal, will change the strategic value of nearly every port in the Caribbean and of many in the Pacific, because of the consequent increase of trade passing that way. Imagine Suez closed again forever, and consider the twofold effect, — upon the Cape of Good Hope ports and upon those of the Mediterranean. Of this we have historical demonstration in the effect upon the fortunes of Venice and Genoa from the discovery of the Cape route. Sea power primarily depends upon commerce, which follows the most advantageous roads; military control follows upon trade for its furtherance and protection. Except as a system of highways joining country to country, the sea is an unfruitful possession. The sea, or water, is the great medium of circulation established by nature, just as money has been evolved by man for the exchanges of products. Change the flow of either in direction or amount, and you modify the political and industrial relations of mankind.

In general, however, it will be found that by sea, as by land, useful strategic points will be where highways pass, and especially where they cross or converge; above all, where obstacles force parallel roads to converge and use a single defile, such as a bridge. It may be remarked here that while the ocean is easier and has, generally, fewer obstacles than the land, yet the obstacles are more truly impassable. Ships cannot force their way over or through obstacles, but must pass round them — turn them. Historical feats, such as those of Napoleon crossing the Little St. Bernard, Macdonald the Splügen, and the Russians in 1877 the Balkans, seem to show that nothing is im-

passable to infantry; but modern ships are not to be dragged over dry land, like the ancient galleys. Hence, while on land the defenses of what may seem to be the only practicable road may be unexpectedly turned by an army, as the Persians by a mountain path reached the rear of the Greeks at Thermopylæ, assurance can be felt that ships can follow only known tracks. Where there are many of these, as, for instance, the passages between the Windward West India Islands, the situation-value of the ports at each passage is proportionately diminished.

Consider, for instance, the enormous effect upon the value of Port Royal, Martinique, and Port Castries in Santa Lucia — already good strategic points — if a continuous line of land extended from the east end of Haiti, through the Windward Islands, to South America, broken only at the passage between the two islands named. Their influence then would be almost identical with that of Gibraltar. As it is, they are in a class with Hawaii and Bermuda; and lower in the class, because their positions, though excellent, are less unique than either. They have rivals within their respective areas, while the two others have not. There can be no question that, whatever the intrinsic military strength of the ports in the Windward Islands, their situation-value is seriously lowered by the fact that an enemy's shipping or supply vessels bound to the Isthmus can, by a circuit, avoid passing near. Jamaica cannot be equally avoided, still less the Chiriqui Lagoon, least of all Colon when the Panama Canal becomes a fact. It is possible, for instance, that in war between Great Britain and France a ship bound to the Isthmus, wishing to avoid passing near Santa Lucia, could go through the Anegada or Mona Passage; and, in fact, such evasions were often successfully resorted to by the French, to avoid Rodney's lying in wait.

2. Military Strength

We come now to the second element in the strategic value of any position, namely, its military strength, offensive or defensive.

It is possible to imagine a point very well placed yet practically indefensible, because the cost of defensive works would be greater than the worth of the place when fortified. A much stronger site, although somewhat further off, would throw such a position out of consideration.

There are several elements, advantageous or disadvantageous, which enter into the characteristics making a port strong or weak, but they will all be found to range themselves under the two heads of defensive and offensive strength.

I. Defensive strength.

The defense of seaports, as distinguished from the offensive use made of them, ranges under two heads: 1. Defense against attack from the sea; that is, by ships. 2. Defense against attack from the land; that is, by troops which in the absence of resistance may have landed at some near point of the coast and come up in the rear of the fortress.

As offensive efforts made from a fortified seaport, to facilitate which it has been fortified, are always by ships toward the sea, the sea may properly be spoken of as the front of such a port, while the land side is the rear.

The recent siege of Port Arthur has illustrated the propositions just advanced. Port Arthur was defended against naval attack and against land attack, in front and in rear, and attack was made from both quarters. The siege illustrated also another proposition, made in the original draft of these lectures, that the defense of ports, in the narrow sense of the word "defense," belongs chiefly to the army. The Russian navy contributed little to the de-

fense. If it had been in better moral and material condition, and efficiently used, it might have contributed very materially to the endurance of the port by offensive operations; by sorties, by harassing the enemy. Endurance is a principal element of defensive strength in any general strategic scheme. The great gain of defense, in the restricted sense of the word, is delay. The defense of Port Arthur gained time for the Russians; had the defense been more obstinate, more time still would have been gained. As it was, ample opportunity was obtained for the Baltic fleet to arrive; and no one can tell how far the delay contributed to prolong the land campaign, which, as it was, left Japan with the most of her work still before her, if Russia stood firm.

An illustration of the character of operations by which a navy contributes to defense, to delay, was afforded in the same war by the capture at sea of a Japanese transport carrying a large part of the siege guns for the siege of Port Arthur. This sensibly prolonged the siege. It was an attack upon the communications of the besiegers. Attacks of that character, besides the actual injury inflicted, necessitate to the enemy an elaboration of precautions which sensibly protracts the issue. Such action, however, though defensive in result, is not so in method. It therefore is called, properly enough, an offensive-defensive, and is absolutely essential to any scheme of defense. Napoleon said that no position can be permanently maintained if dependent upon defense only; if not prepared for offensive measures, or if it fails to use them. The enemy must be disturbed or he will succeed. At one time in the history of war this truth was so clearly apprehended, and the conditions of passive resistance so thoroughly appreciated, that the endurance of a besieged fortress could be calculated almost as exactly as a mathematical solution; that is, granting no attempt at relief. In a properly coördinated

system of coast defense this counter-action, molestation, the offensive-defensive, belongs to the navy.

Coast defense in the restricted sense, when action is limited to repelling an immediate attack, is the part of the army chiefly; hence the scheme of preparations for such defense also belongs primarily to the army. That being the case, it is not for naval officers to distribute the preparations among the branches of the military service; but it is permissible to note that the duty of planning fortifications and superintending their construction is by accepted tradition assigned to military engineers.

It should be noted also that such tactical considerations as the extent of the outer lines necessary to cover the landward defensive works of a place, and the consequent numbers of the garrison required to insure their maintenance, are questions of expert military knowledge. It follows, and will be still more evident as the naval requirements develop in the ensuing treatment, that sound decision in the selection of naval stations at home and abroad is for combined military and naval consultation. Indeed, every question and every preparation touching seacoast operations present this feature of combination between army and navy, working to a common end.

In all such coöperations there will be found conflicting conditions, as there will in most plans of campaign and in positions taken for battle, — strong here, weak there. War in all its aspects offers a continual choice of difficulties and advantages. It is in reconciliation effected among these as far as possible, in allowance of due predominance to the most important, in disregard of difficulties where practicable, that the art of the commander consists. The one most demoralizing attitude is that which demands exemption from risks, or is daunted unduly by them.

The siege of Port Arthur illustrated another truth, which will be found of general application; namely, that

coast fortresses are in greater danger of capture by land attacks than by those from the sea. Santiago showed the same, imperfect as were its sea defenses. The reason is obvious: no vessel, no construction resting upon the water, can bear the same weight of ordnance and the same armor that a land work can. To this inferiority modern warfare has added the additional danger to ships of the submarine mine, the effects of which upon the movements possible to vessels were so often and so strikingly illustrated in the war between Japan and Russia. No similar equal danger exists for land fortifications. In brief, ships are unequally matched against forts, in the particular sphere of forts; just as cavalry and infantry are not equal, either to the other, in the other's proper sphere. A ship can no more stand up against a fort costing the same money, than the fort could run a race with the ship. The quality of the one is ponderousness, enabling great passive strength; that of the other is mobility.

Countries which are entirely surrounded by water, or whose land frontiers are bordered by communities of much less military strength, as is the case with Great Britain and the United States, may easily fall into the error of defending ports only against attack from the sea. For ports which are commercial only, not essential to naval activities, this must answer; for there is a limit to the money that can be spent upon coast fortifications. But any scheme of naval activity rests upon bases, as do all military operations. Bases are the indispensable foundations upon which the superstructure of offense is raised. Important naval stations, therefore, should be secured against attack by land as well as by sea. To illustrate this fact was the aim of General Wood in recent conjoint operations about Boston, and the ease with which the city fell shows the need of defense by land. Purely commercial cities are defended sufficiently by the condition that a large

hostile expedition will be employed only in securing an adequate result, a decided military gain, such as the destruction of a great naval base; while a small landing force, though it conceivably might capture a commercial port, can do so only by a surprise, which in effect is a mere raid, liable to interception, and in any event productive of no decided military advantage.

In the English maneuvers of August, 1888, it was found, as might have been predicted, that it is impossible for a blockading force to prevent the escape of single ships. When such had escaped, there was shown, first, what has already been said as to the perplexity of the blockade as to the direction taken; and second, the futility of depending upon the navy alone for the defense of seaports. The escaped cruisers appeared before half a dozen English ports, which in the absence of fortifications had at once to admit their powerlessness and to pay ransom.

The ease of running a blockade has been very much qualified since 1888 by the development given to stationary submarine mines placed by the outside enemy. The effect of these upon cruisers, even of moderate size, and still more upon a fleet of battleships, is not only the actual injury possible from them, but the delay imposed. This delay indeed is in the strictest sense a strategic factor. As illustrated in the war between Japan and Russia, the outside fleet is enabled to choose its situation within pretty wide limits, in reliance upon the inevitable period of time the inside will need to assure its passage, by determining a safe channel. Yet, while this is true, it is not so unqualifiedly.

Skill and vigilance may now, as in all ages and conditions, enable the one party or the other to get the better; especially the one inside. I presume that a simple application of the three-point problem, to determining a straight channel through a presumed mine field, might be carried

on by three lights placed at night for the observers; that such channel might be swept by night as well as by day; and that, once cleared, further laying of mines might be prevented by adequate scouting. Range lights will give pilotage for the channel cleared. Yet, granting that such means may be efficacious, the need for using them and the onerousness of their demands show how conditions have altered in twenty years. Obviously, too, the outsiders must try to stop such operations, with the result of a good deal of fighting corresponding to that which the army calls "outpost."

The ransoms levied by cruisers in 1888, or the alternative bombardment, illustrate both the need of sea-front fortifications for commercial ports, and the needlessness of works on their land side. The cruisers could not have stood up against a very few heavy guns, and they had not force to attempt a landing. For a fleet, or for a great landing army, the game at a mere commercial port would be too small; not worth the candle, as the French say. Such expeditions would direct effort against a naval base. Now that bombardment of unfortified seaports is forbidden by international agreement, the question remains to what extent it will suit the policy of a nation by non-fortification to permit the tranquil occupation of its convenient harbors by an enemy's vessels; for the purpose, for instance, of coaling, or repairing, or demanding supplies. Of course any molestation of vessels so engaged is active war, and would at once deprive the port of the immunity attendant upon not being fortified.

A word is due on the subject of coast-defense ships, although we hear less of these now than once. A floating defense which is confined to the defensive, by which is meant that it can put forth its offensive power only when the enemy sees fit to attack, is inferior to the same amount of offensive power established ashore, for several reasons:

(1) Because it cannot bear the same amount of weight as a land work; (2) because it is open to modes of attack to which the land work is not open, as the torpedo and the ram; (3) because the very factor which constitutes its chief advantage, its mobility, is also a source of weakness by necessitating the attention of a large part of the personnel or garrison to the mere handling of the fortification. To this is to be added a consideration, important to my mind, though I have not seen it noticed elsewhere, that a system of coast defense relying mainly upon ships is liable to be drawn in mass to a point other than the enemy's real objective, and so to leave the latter uncovered. Land works are not open to that mistake. Nelson in his scheme for the defense of the Thames particularly and of the southeast coast of England generally, in 1801, wrote a paper which illustrates his comprehensive military genius as really as his more conspicuous achievements do. In this he laid peculiar stress upon the order that the coast-defense vessels, the blockships, as they were called, should on no account be moved under apparent imminent necessity. Their stations had been carefully and deliberately chosen, in quiet consideration; they must not be changed under the influence of hasty apprehension. Permanent works, established in quiet moments on sound principles, have the advantage that they cannot be shifted under the influence of panic. The distributions of the American fleet during the Spanish war furnish interesting matter for study as to the effects of popular fears on military dispositions; of which, for that matter, general history affords many examples.

A moment's thought will show that one mode of coast defense by the navy to which attention is very largely directed nowadays, that by torpedo-vessels and submarine boats, is not strictly defensive in its action, but offensive. For harbor defense, torpedo-vessels are confined almost wholly to an offensive rôle, — the offensive-defensive,—

because an attack by a fleet upon a port will usually be by daylight, while torpedo-vessels, in the general scheme of harbor defense, must limit their efforts mainly to the night. The chief rôle of the torpedo-vessels is in *attack* upon a hostile fleet which is trying to maintain its ground near the port.

The great extension and development given to torpedo-vessels since these lectures were written do not seem, as far as experience goes, to have affected the general principles here enunciated; nor in actual war has anything occurred to contradict the conclusions indicated to students of naval matters twenty years ago. Torpedo-vessels, when relying upon themselves alone, have always attacked by night. By day they have merely completed destruction already substantially achieved by the battleships; and this probably is the function that will fall to them in the unusual case of a fleet seriously attacking fortifications. They then may poniard the wounded, especially if left behind by their friends. The increase of size in torpedo-vessels, above the torpedo-boat of first and second classes, in which they began, has brought with it gun armament, as was then predicted; and gun fights between the torpedo-vessels of the opposing sides, much resembling the skirmishes incident to land sieges, were frequent in the operations around Port Arthur. Had the defensive rôle of the Russians fallen to the Japanese, we doubtless should have had more torpedo attack — the offensive-defensive — directed against the outside fleet. Their audacious attempts to block the harbor, by sinking vessels in the channel ways, give assurance that, in the reverse case, similar energy would have been directed against ships attempting to hold their ground near the port.

Defenses, whether natural or artificial, covering strategic points such as coast fortresses, play a very important part in all warfare, because they interpose such passive resist-

ance to the assailant as to enable smaller force to hold in check a larger. Their passive strength thus becomes equivalent to a certain number of men and allows the holder to let loose just so many to join the active army in the field. The defenses of Port Arthur permitted the tenure of the place by a much smaller number of men than the besiegers were compelled to employ in the siege. This evidently signifies that in the field campaign the Russian army was by so much more numerous, and the Japanese by so much fewer. Places so held serve many purposes and, in some proportion, are absolutely necessary to the control of any theater of war. They are as essential to sea as to land war; but, looked upon as conducive to the attainment of the objects of war, they are to be considered inferior to the army in the field. To take an extreme case, a *reductio ad absurdum*, if the number of such posts be so great that their garrisons swallow up the whole army of the state, it is evident that either some of them must be abandoned or the enemy's army be left unopposed. Thus Jomini says, "When a state finds itself reduced to throw the greater part of its force into its strong places, it is near touching its ruin." This received illustration in the war between Japan and Russia. Russia was reduced to shutting up her fleet in Port Arthur and Vladivostok; and persistence in this course, whether by choice or by necessity, prognosticated the ruin which overtook the naval predominance which at the beginning of the war she actually possessed over Japan.

In the sphere of maritime war, the navy represents the army in the field; and the fortified strategic harbors, upon which it falls back as ports of refuge after battle or defeat, for repairs or for supplies, correspond precisely to strongholds, like Metz, Strasburg, Ulm, upon which, systematically occupied with reference to the strategic character of the theater of war, military writers agree the defense of a

country must be founded. The foundation, however, must not be taken for the superstructure for which it exists. In war, the defensive exists mainly that the offensive may act more freely. In sea warfare, the offensive is assigned to the navy; and if the latter assumes to itself the defensive, it simply locks up a part of its trained men in garrisons, which could be filled as well by forces that have not their peculiar skill. To this main proposition I must add a corollary, that if the defense of ports, many in number, be attributed to the navy, experience shows that the navy will be subdivided among them to an extent that will paralyze its efficiency. I was amused, but at the same time instructed as to popular understanding of war, by the consternation aroused in Great Britain by one summer's maneuvers, already alluded to, and the remedy proposed in some papers. It appeared that several seaports were open to bombardment and consequent exaction of subsidies by a small squadron, and it was gravely urged that the navy should be large enough to spare a small detachment to each port. Of what use is a navy, if it is to be thus whittled away? But a popular outcry will drown the voice of military experience.

The effects of popular apprehension upon military dispositions were singularly shown during our war with Spain. Popular apprehension, voiced, it was understood, by members of the national legislature, was the cause of dispositions of the fleet which impoverished the needed blockade of the enemy's ports, and which, in face of a more capable foe, would have enabled the Spanish squadron to gain Cienfuegos, where it would have had the support of the main Spanish army. This, with our very small regular army, and the sickly season beginning, would have been a very different proposition from that presented by the isolated Santiago.

This line of thought requires development. Panic, un-

reasonable apprehension, when war begins, will be found in the same persons who in peace resist reasonable preparation. Unless my information at the time was incorrect, a senator of the United States, who has earned much approval in some quarters by persistent opposition to naval development, was among the most clamorous for the assignment of naval force to the local defense of his own State, which was in no possible danger. In both cases the effect is the result of unreason. "It is better," said a British admiral of long ago, "to be frightened now, while we have time to prepare, than next summer, when the French fleet enters the Channel." The phrase is much more worthy of perpetuation than his other often-quoted "fleet in being."

Where a navy is relied upon for a pure defensive, the demand will naturally follow for many small vessels, — a gunboat policy, — for the simple reason that tonnage put into large vessels cannot be subdivided. Our early single-turreted monitors, being small and relatively cheap, could be numerous. They therefore lent themselves readily to the scheme of a pure defense, widely distributed; the naval analogue of the now discredited *cordon* policy, in which the protection of a land frontier was attempted by distributing the available force among numerous vulnerable points instead of concentrating it in a central position. Any belief that still exists in those monitors, as suited to a general naval policy, will be found associated with the idea of subdivision, one or two vessels to every port. I read, now many years ago, precisely such a project, elaborated for the defense of our Atlantic coast; one, two, or three, single-turreted monitors assigned to each, according to its assumed importance; and this by a trained naval officer. Happily, the last twenty years has seen the conception of a navy "for defense only" yield to sounder military understanding of the purposes of a navy; and that understanding, of the navy's proper office in offensive action,

results as certainly in battleships as the defensive idea does in small vessels.

Every proposal to use a navy as an instrument of pure passive defense is found faulty upon particular examination; and these various results all proceed from the one fundamental fact that the distinguishing feature of naval force is mobility, while that of a passive defense is immobility. The only exception known to me is where permanent — that is, immobile — works cannot be constructed to command the surroundings, because of the extent and depth of the water area to be defended. In illustration, I would cite the suggested artificial island with fortification, proposed for the entrance of the Chesapeake. It is contemplated because the capes are too far apart fully to command the entrance. Conditions being as they are, I conceive that to employ coast-defense ships instead of the artificial island would be a mistake; while possibly, if the water were forty fathoms deep, recourse to a floating defense, elaborately protected against under-water work attack, might be unavoidable, because there would be no alternative measure possible.

Such an exception emphasizes the rule. The strictly defensive strength of a seaport depends therefore upon permanent works, the provision of which is not the business of naval officers. The navy is interested in them because, when effective, they release it from any care about the port; from defensive action to the offensive, which is its proper sphere.

There is another sense in which a navy is regarded as defensive; namely, that the existence of an adequate navy protects from invasion by commanding the sea. That is measurably and in very large degree true, and is a strategic function of great importance; but this is a wholly different question from that of the defensive strength of seaports, of strategic points, with which we are now dealing. It

therefore will be postponed, with a simple warning against the opinion that because the navy thus defends there is no need for local protection of the strategic ports; no need, that is, for fortifications. This view affirms that a military force can always, under all circumstances, dispense with secure bases of operations; in other words, that it can never be evaded, nor know momentary mishap.

I have now put before you reasons for rejecting the opinion that the navy is the proper instrument, generally speaking, for coast defense in the narrow sense of the expression, which limits it to the defense of ports. The reasons given may be summed up, and reduced to four principles, as follows:

1. That for the same amount of offensive power, floating batteries, or vessels of very little mobility, are less strong defensively against naval attack than land works are.

2. That by employing able-bodied seafaring men to defend harbors you lock up offensive strength in an inferior, that is, in a defensive, effort.

3. That it is injurious to the *morale* and skill of seamen to keep them thus on the defensive and off the sea. This has received abundant historical proof in the past.

4. That in giving up the offensive the navy gives up its proper sphere, which is also the most effective.

II. Offensive strength.

The offensive strength of a seaport, considered independently of its strategic situation and of its natural and acquired resources, consists in its capacity:

1. To assemble and hold a large military force, of both ships of war and transports.

2. To launch such force safely and easily into the deep.

3. To follow it with a continued support until the campaign is ended. In such support are always to be reckoned facilities for docking, as the most important of all supports.

It may be urged justly that this continued support depends as much upon the strategic situation of the port and upon its resources as upon its strength. To this, however, must be replied that it was never meant that the division between the different elements which together make up the total value of a seaport was clear-cut and absolute. The division into heads is simply a convenient way by which the subject can be arranged and grasped more clearly. Some necessary conditions will affect, more or less, all three, strength, position, and resources, and will unavoidably reappear under different heads.

1. Assembling. It will be seen that depth of entrance, and the area of anchoring ground for large vessels, are elements of offensive strength. Without depth the largest ships of war could not get in and out, and without great extent the requisite fleet could not be assembled. Depth of water, however, may be a source of weakness defensively, because allowing the entrance of the enemy's heavy vessels. In a port of secondary importance, fitted only to be a base for commerce destroying (*e. g.* Wilmington, N. C.), there would be no gain of offensive strength, but rather loss of defensive, by great depth at entrance.

Suitable ground on shore for the establishment of docks and for storehouses, for the maintenance, repair, and supply of ships, is a necessary condition of offensive strength. That this ground should be so situated as not to be open to injury by the enemy is a condition of defensive strength, and the same is to be said of the anchorage ground. Healthy ground for the encampment or lodging of troops, etc., may be properly included in the elements of military strength, both offensive and defensive. A special instance of opportunity to constitute this feature of camping ground for an expedition was afforded when the site for the navy yard in Puget Sound was acquired. The original commission recommended the acquisition of an extensive area for

that reason, among others; but the recommendation was not adopted.

2. Launching. To launch a force safely and easily into the deep implies that when ready to start it can go out at once and take up its order of battle in the presence of an enemy, unmolested; favored in doing so either by the hydrographic conditions outside allowing the necessary maneuvering without interference, or by the protection of the port covering the fleet with its defensive power. It is, of course, perfectly conceivable and possible that a fleet may by its own power insure its own freedom of maneuver; but the time occupied in changing from one order to another is always critical, and such maneuvers should be performed out of the reach of the enemy. In order to complete the offensive strength of the place, it should be able with its own means to cover the fleet during such change of formation; beyond that, the offensive strength of the port for this purpose cannot be expected to reach.

This case is analogous to that of an army passing through a defile, — room must be secured beyond to deploy. If the entrance be narrow, the fleet must get outside before being able to maneuver. In this case, the conditions of offensive and defensive strength again clash, for a narrow and tortuous entrance is most easy to defend. It may be interesting to recall that at the time these lectures were written, 1887, a very large, perhaps even a predominant, naval opinion held that the ram would play the most prominent part in naval warfare. From this followed that fleets would approach one another bows on, and that deployment would mean the formation of a line abreast, bringing all bows towards the enemy. It was such a deployment that was primarily in my mind when the paragraph just read was written. Experience and progress have restored to the gun its supremacy; and as a ship is many times longer than it is wide, a greater amount of gun power can be de-

veloped along the side than across the beam. The small, single-turret, monitor is the only exception to this. It follows that deployment, from column heading toward the enemy, means now a change of course, by which the broadsides of all the vessels are brought on to the same line, with all the guns training towards the enemy.

If a fleet is able to steam out from port in line abreast, a change of course all together, when nearing the enemy, effects such deployment; but the channels by which harbors are left are usually too narrow for this. Ordinarily vessels must go out in column, and form line by a graduated movement. An outside enemy awaiting such issue would seek to deploy across the exit of the channel, out of range of the forts but within range of the exit, enabled thus to concentrate fire upon the leaders of the column before the vessels following can give support by deploying their batteries.

Belts of submarine mines, laid by the one party or the other, as was largely done by both the Japanese and Russians, may affect the conditions constituted by nature. Submarine mines may be said to introduce artificial hydrographic conditions. The inside party would aim to keep the enemy, by fear of mines, so far distant as to be out of range of its point of deployment; and the effect may be intensified by an energetic use of torpedo vessels and submarines. At Port Arthur, the Russian mines and the apprehension of torpedo attack did fix the Japanese fleet to the Elliott Islands, so that the Russians when they came out had no trouble about deploying.

An outside fleet, on the other hand, would wish by a like use of mines to prevent the issuing fleet from deploying until it had passed beyond support by the shore guns. The Japanese did not attempt this; that is, one-third of their battleship force having been lost early in the war, the exigencies of their case led them to seek the safety of a

boom-protected anchorage, rather than expose their armored ships to torpedo attack by remaining continuously close to the port, in order to obtain the advantage of concentration on the head of the enemy's column. Their mine fields, by making the exit dangerous, enforced delay upon the enemy's fleet, enabling themselves to come up before it could escape; but this strategic advantage was not accompanied with the tactical advantage of concentration upon the leading enemies during the critical moment preceding deployment.

All these dispositions — boom anchorage, mine fields, concentration on enemy's leaders — are tactical. My subject is strategy. The excuse for the apparent digression is that the strength of a naval base of operations is a strategic consideration, affecting all the theater of war. Tactical facilities and disabilities are elements of strength or weakness, and as such a general consideration of them falls under the lawful scope of strategy. Mine fields, as used in the latest war, have introduced a new condition, affecting that element of offensive strength in a naval base which has been defined as the ability to launch a maritime force easily and safely into the deep.

These tactical considerations have a further very important bearing upon a strategic question of the gravest order; namely, the proper position for an outside fleet charged with the duty of checking the movements of a more or less equal enemy within a port. Hawke and St. Vincent in their day answered: Close to the port itself. Nelson, more inclined to take risks, said: Far enough off to give them a chance to come out; to tempt them to do so, for we want a battle. The difference was one of detail, for both aimed at interception, though by different methods. It may be mentioned in passing that Nelson paid for the deliberate looseness of his lines by some periods of agonizing suspense, touch with the enemy being lost.

The strategic reply to this question is as sure as historical experience can make it. The intercepting fleet must keep so near the harbor's mouth that the enemy cannot get a start. A start may be retrieved, as Nelson did; but again it may not, and the risk should not be taken. Wireless can do much to retrieve; but wireless needs a sight of the enemy to give it its message. The Japanese solution at Port Arthur — that is, the stationing their main fleet at the Elliott Islands — answered, because the Russians displayed neither energy nor ingenuity. A channel cleared by night sweeping, adequate range lights, a little "D — n the torpedoes," and a dash by night might have transferred the Russian fleet to Vladivostok, granting the Japanese at the islands. The difficulties were no greater than have been overcome often before, and the strategic situation would have been greatly modified. The Japanese recognized clearly that it would have been to them a distinct check. The tactical problem of getting the Russian fleet out of Port Arthur, under the two suppositions of the enemy at the Elliott Islands and before the port itself, would afford a very interesting tactical study, with profitable strategic conclusions.

If a port have two outlets at a great distance from each other, the offensive power will be increased thereby, the enemy being unable to be before both in adequate force. New York is a conspicuous instance of such advantage. If the two outlets, by the Sound and by the ocean, are suitably fortified, an enemy cannot be near both without dividing his fleet into two bodies out of mutual supporting distance. A united hostile fleet cannot command both channels until right before the city, where the channels meet. The same advantage, to a much less degree, is found at Port Orchard, Puget Sound, and had weight with the commission which chose this point for the navy yard. The port of Brest has the same, which with sailing

fleets gave a distinct advantage. Wireless telegraphy of course facilitates the movement of the enemy to one entrance from the other, or from a central position; but the gain over former conditions is less than one would imagine. Nelson, fifty miles from Cadiz, learned of the enemy's sailing in two and a half hours by a chain of signal vessels. His chance of intercepting the enemy was as good, perhaps even better, than that of a steam fleet similarly situated, dependent upon wireless. The speed of the escaping fleet under steam would fully counterbalance, probably more than counterbalance, the gain of the outsider by speedier information. Over twenty-four hours were required for the allied fleets to leave Cadiz before Trafalgar.

In order that two outlets should confer fully the offensive advantage claimed, it is necessary that they should be so far apart that the enemy cannot concentrate before one, between the time that the fleet within indicates its intention of coming out and the time when it has formed its order of battle outside. With steam, few ports are so favorably situated; the dependence of sailing-ships upon the direction and force of the wind introduced a tactical and strategic element which can now be disregarded. "Keep all fast," once wrote Lord St. Vincent, "for we know that with a wind to the southward of southeast by south no ship of the line can leave Brest." The analogy of this to the delay in coming out caused by an enemy's mine field is easily seen.

The third element in the offensive strength of a strategic port has been stated as the capacity, after having covered the exit of a maritime force, to follow it with continued support throughout the intended operations.

Obviously, in any particular port, this capacity to support active operations will depend upon the scene and character of the operations. In the war between Japan and Russia, the Japanese dockyards were the scene both of the equipment and refreshment, restoration and repair, of the

ships. They thus followed them continuously; stood at their back. The Russian home ports despatched the vessels, but had nothing to do in sustaining them on the theater of war. A fleet equipped at San Francisco for operations in the Far East would require support nearer than that harbor. Portsmouth and Plymouth were the great Channel yards of Great Britain a century ago, as they still are; but the two ablest English commanders, Hawke and St. Vincent, would not allow their vessels to seek either for support. For supplies, for refreshment of the crews by rest, for cleaning bottoms, for overhaul of motive power, they were sent to Torbay.

All this is simply to reaffirm that for seaports position —situation — is the first in importance of the elements of strategic value. This illustrates again Napoleon's saying, "War is a business of positions." In the War of Secession, the United States ships were equipped in the northern yards, but were sustained in the campaign by nearer bases, — Port Royal, Key West, Pensacola. This is a frequent condition; indeed, with the wide scope of naval operations, the more usual. But it is better that the two processes, original equipment and continuous support, be combined behind the same defenses, where possible. Having in view the increasing importance of the Gulf and Caribbean, increasing because of the increasing imminence of Pacific questions and the near completion of the Canal, it will be pertinent to inquire closely as to whether the northern navy yards adequately meet possible emergencies of the character now under discussion.

To follow a fleet with support means principally two things: (1) To maintain a stream of supplies out, and (2) to afford swift restoration to vessels sent back for that purpose.

"Supplies" is a comprehensive word. It embraces a large number of articles which are continuously being ex-

pended, and which must be renewed by means of storeships periodically despatched. It applies also to maintaining the condition of a fleet by a system of reliefs. This involves a reserve, so that ships long out and worn are replaced by fresh vessels, and, yet more important, by refreshed crews. Of the capacity thus to refresh and thus to replace, numerous dry docks are the most important single constituent, because the most vital and the longest to prepare.

Historical instances, by their concrete force, are worth reams of dissertation. The capacity of the Japanese dockyards may have been ample or may not, but by the Japanese government it was felt to be of critical importance that all their armored ships should be docked and restored in the briefest time possible after the fall of Port Arthur. To achieve this was a matter of great anxiety; to be measured by Togo's signal, "The safety of the Empire depends upon to-day's results." One of the factors in the results of that day was that the dockyards which sent out the fleet were able to dock all the vessels in the respite of time gained by Russia's dilatoriness. Thus the Japanese fleet was an assemblage of veterans restored by repose and repair. Clearly it would have been a better condition if the yards throughout the war could have contained as a constant rule two armored ships, docking and resting crews; a reserve to relieve others, and also at critical moments to augment the total strength of the fleet. It is not ideal management to have to clean and repair an entire navy at the same moment; but it was forced upon Japan by the fewness of her armored ships, which required their constant employment at the front. Such a reserve of ships corresponds to the margin of safety of the engineer.

It may occur to some that this capacity to sustain a fleet in its operations falls more exactly under the head of Resources, the last of the three heads under which the elements which affect strategic value of seaports have been

summarized. It is true that this capacity is one of resources, yet it may be claimed that its worth is more evident when considered as an element of offensive strength. If the capacity of dockyards be classed under resources, less attention is attracted to the fact that upon that capacity may depend the offensive energy of a war.

Subdivision of a single subject cannot be into compartments separate from one another. Subdivision is not an end in itself. It is a means to exact thinking, and to thinking out a matter more thoroughly, because more systematically than would otherwise be done. Also, a comprehensive summary under heads tends to insure that in a particular decision or choice of a position no consideration will be overlooked.

3. Resources

The wants of a navy are so many and so varied that it would be time lost to name them separately. The resources which meet them may be usefully divided under two heads, natural and artificial. The latter, again, may be conveniently and accurately subdivided into resources developed by man in his peaceful occupation and use of a country, and those which are immediately and solely created for the maintenance of war.

Other things being equal, the most favorable condition is that where great natural resources, joined to a good position for trade, have drawn men to settle and develop the neighboring country. Where the existing resources are purely artificial and for war, the value of the port, in so far, is inferior to that of one where the ordinary occupations of the people supply the necessary resources. To use the phraseology of our subject, a seaport that has good strategic situation and great military strength, but to which all resources must be brought from a distance, is much inferior to a similar port having a rich and developed friendly

region behind it. Gibraltar and ports on small islands, like Santa Lucia and Martinique, labor under this disadvantage, as compared with ports of England, France, the United States; or even of a big island like Cuba, if the latter be developed by an industrial and commercial people. The mutual dependence of commerce and the navy is nowhere more clearly seen than in the naval resources of a nation, the greatness of which depends upon peaceful trade and shipping. Compared with a merely military navy, it is the difference between a natural and a forced growth.

Among resources, dry docks occupy the place first in importance: (1) because to provide them requires the longest time; (2) because they facilitate various kinds of repairs; (3) because by the capacity to clean and repair several vessels at once, and so restore them with the least delay to the fleet, they maintain offensive energy.

Dry docks represent in condensed form the three requirements of a strategic seaport. In position they should be as near the scene of war as possible. Strength is represented by numbers; the more numerous the docks, the greater the offensive strength of the port. For resources, the illustration is obvious; docks are an immense resource. In contemplating the selection of a navy-yard site, it is evident that facility for excavating docks is a natural resource, while the subsequent construction is artificial. Evidently, also, a commercial port will supplement these resources in an emergency by the docks it may maintain for commerce, thus exemplifying what has been said as to the wide basis offered by resources developed by man in his peaceful occupation of a country.

CHAPTER VIII

FOUNDATIONS AND PRINCIPLES

(Continued)

Strategic Lines

THE strategic points on a given theater of war are not to be looked upon merely separately and as disconnected. After determining their individual values by the test of position, military strength, and resources, it will remain to consider their mutual relations of bearing, distance, and the best routes from one to the other.

The lines joining strategic points are called by military writers strategic lines. On land there may be several lines, practicable roads, connecting the same two points; any one of which may at different times have different names, indicating the special use then being made of it, as, line of operation, line of retreat, line of communications, etc. At sea, other things being equal, the line that is shortest, measured by the time required to pass over it, is ordinarily the one to be chosen by a fleet; but this obvious remark, approaching a truism, is open to frequent modification by particular circumstances.

Illustration is afforded by the very recent case of Rozhestvensky's fleet when leaving French Cochin China, or, yet more critically, the Saddle Islands, for its final push towards Vladivostok. In the first instance, there was the question of passing between Formosa and the mainland, the direct route, or going outside the island. The latter was followed. In leaving the Saddles, the shortest route, by the Sea of Japan, was the one chosen; yet with all the risks that would be involved in the greater delay occasioned

by going east of Japan, through Tsugaru Straits, it is evident that there were favoring chances, which needed careful weighing. The position occupied by Admiral Togo was judiciously chosen to facilitate intercepting in either case; but the fact that he passed through some thirty-six hours of anxious suspense, because the Russians did not appear nor tidings of them come in, shows the possibilities of the situation. The very strength of his conviction that they *must* come that way would be an element favoring the Russians, had Rozhestvensky decided for the other. There are temperaments which cannot readily abandon a conviction, as there are others which cannot bear suspense.

Of the numerous lines which may be traced on the surface of the globe joining two seaports, two general divisions may be made, — those that cross the open sea, and those that follow the coast-line. A glance at the chart of the Gulf of Mexico will illustrate my meaning, showing the two available routes to Key West from the mouth of the Mississippi, or from Pensacola. To use the open sea, which is generally the shortest, military command of the sea is needed; when this command is not held, vessels are forced to follow their coast-line, usually by night, and to use such harbors of refuge or other support as the coast with its conformation will give. The flotilla with which the first Napoleon intended to invade England illustrated this method. The large number of vessels composing it necessitated building them in many different places. To reach the point of assembly, Boulogne, they had to run the gantlet of the British cruisers that controlled the English Channel. This was successfully done, though with a certain proportion of loss, by keeping closer to the coast than the enemy could safely follow, while an elaborate scheme of coastwise defense by stationary and flying batteries was also provided for them. In the War of 1812, American coasting trade, as far as it survived, was driven to the

same evasion, but without the same support. The same conditions prevailed in Nelson's time along the Riviera of Nice and Genoa. Whenever the open sea is controlled by an enemy recourse will be had to this means, usually by night; for, while land communication is ampler and surer than formerly, it is not yet able to replace the coasting trade. It is only necessary to consider the coal traffic by sea from the Delaware to New York and the Eastern States, to see that it cannot lightly be surrendered, or replaced by railroad, without much suffering to the community and derangement of industries.

Neutral coasts may thus in some degree be made part of the line of approach to belligerent ports, endangered by the nearness of an enemy. For example, if war existed between Germany and Great Britain, with the British navy controlling the North Sea, German vessels having once reached the coast of France or of Norway might proceed with safety within the conventional three-mile limit.

The most important of strategic lines are those which concern the communications. Communications dominate war. This has peculiar force on shore, because an army is immediately dependent upon supplies frequently renewed. It can endure a brief interruption much less readily than a fleet can, because ships carry the substance of communications largely in their own bottoms. So long as the fleet is able to face the enemy at sea, communications mean essentially, not geographical lines, like the roads an army has to follow, but those necessaries, supplies of which the ships cannot carry in their own hulls beyond a limited amount. These are, first, fuel; second, ammunition; last of all, food. These necessaries, owing to the facility of water transportation as compared with land, can accompany the movements of a fleet in a way impossible to the train of an army. An army train follows rather than accompanies, by roads which may be difficult and

must be narrow; whereas maritime roads are easy, and illimitably wide.

Nevertheless, all military organizations, land or sea, are ultimately dependent upon open communications with the basis of the national power; and the line of communications is doubly of value, because it usually represents also the line of retreat. Retreat is the extreme expression of dependence upon the home base. In the matter of communications, free supplies and open retreat are two essentials to the *safety* of an army or of a fleet. Napoleon at Marengo in 1800, and again at Ulm in 1805, succeeded in placing himself upon the Austrian line of communication and of retreat, in force sufficient to prevent supplies coming forward from the base, or the army moving backward to the base. At Marengo there was a battle, at Ulm none; but at each the results depended upon the same condition, — the line of communication controlled by the enemy. In the War of Secession the forts of the Mississippi were conquered as soon as Farragut's fleet, by passing above, held their line of communications. Mantua in 1796 was similarly conquered as soon as Napoleon had placed himself upon the line of retreat of its garrison. It held out for six months, very properly; but the rest of the campaign was simply an effort of the outside Austrians to drive the French off the line, and thus to reinforce the garrison or to enable it to retreat.

Rozhestvensky's movement towards Vladivostok was essentially a retreat upon his home base. The Japanese were upon the line of communication and retreat in force sufficient to defeat him, as Napoleon at Marengo did the Austrians. I think that Cervera was headed into Santiago by the belief or the fear that before Cienfuegos, therefore upon the line of his retreat thither, he would meet a force against which he could not hope for success in the condition of his fleet. That the case was not as he sup-

posed it to be remains a reflection upon the management of the United States navy, the reasons for which reach far behind the naval authorities. The Spanish Minister of Marine stated in the Cortes that Cervera went to Santiago because there was no other place to which he could go. Sampson had been heard of at Porto Rico. The instance illustrates the advantage of two ports on the same frontier, — in this instance the south shore of Cuba, — as well as the effect produced by a hostile force upon the line of communications.

Santiago and Cienfuegos illustrate the advantage of two ports of retreat, as Rozhestvensky experienced the disadvantage of only one. For a fleet acting offensively from a given coast as a base, two ports on that coast also facilitate communications in two principal ways: 1, the raiders of the enemy cannot concentrate on one line, but must divide on two, which halves the danger from them; 2, two ports are less liable to be congested than one is. The question is very much the same as the supply of a division of guns on board ship; how many guns can one chain of supply serve? Napoleon enunciated the following definition: The Art of War consists in dissemination of force in order to subsist, with due regard to concentration in order to fight. To provide two or more ports of supply is to disseminate the means of subsistence without impairing the concentration of the fleet.

Santiago and Cienfuegos — to which may be added Havana, as on a coast line strictly continuous and having land communication with the other two — may be cited as illustrating that a coast line with several suitable ports is essentially one long base of operations, interconnected. By the means at its disposal, torpedo vessels and cruisers, it will be able more or less to keep the immediate neighborhood of the shores free from molestation by an enemy's cruisers. Such a coast-line is therefore a strategic line,

embracing several strategic points. It will happen more often than not that several points on the sea frontier nearest the theater of war must be occupied by a state, for strategic reasons. When great efforts have to be made, it will be necessary to carry on the preparations at more than one point. In Napoleon's Egyptian expedition in 1798, France had on the Mediterranean coast only one naval port properly so called, — Toulon; but detachments were prepared in several other ports under French control, and joined subsequently to the sailing of the main fleet. Other reasons may impose a similar distribution of activity. Moreover, it is hazardous to depend exclusively on one arsenal for the supply or repairs of a navy, for a successful blockade or attack might paralyze all operations depending upon it, and the retreat of a beaten fleet upon a single point is more easily intercepted. It is difficult to imagine a more embarrassing position than that of a fleet, after a decisive defeat, hampered with crippled ships, having but a single port to which to return. It may be laid down as an essential principle that on every sea frontier there should be at least two secure ports, sufficiently fortified, and capable of making any and all repairs. In such cases pursuit may be baffled, if the enemy can be dropped out of sight; but with one port he knows to which you are bound. Togo, for instance, knew that Rozhestvensky must be bound to Vladivostok, although he did not know whether he would go through the Strait of Korea or that of Tsugaru.[1] If the two ports are tolerably near each other so much the better, as the enemy cannot then judge the aim of the retreating fleet by slight indications.

Chesapeake Bay and New York on our Atlantic coast are two ports clearly indicated by nature as primary bases of supply, and consequently for arsenals of chief importance. For these reasons, they are also the proper ports of retreat in

[1] See map facing page 426.

case of a bad defeat, because of the resources that should be accumulated in them; and both for supplies and as refuges they should be adequately fortified on the land side as well as the sea. Other ports on the same coast, Boston, Philadelphia, Charleston, and others, may serve for momentary utility, disseminating provision and preparation; but the protection given them as commercial ports will suffice for the inferior use made of them for supplying the fleet. Economy of means and of money forbid the multiplication of maritime fortresses beyond the strictly necessary; and it seems probable that the pronouncement of the Archduke Charles, that one first-class and one second-class fortress is sufficient for a land frontier, is true still of maritime fortresses. How it may be for land is beyond my province to say. It can be seen that New York by its natural advantages lends itself profitably to a development greater than Norfolk; because of its two entrances, and because Narragansett Bay could be embraced in the general scheme of defense for New York. This would provide practically three entrances or exits for a fleet.

Vladivostok and Port Arthur illustrate the same propositions, though the situation was for them immensely complicated by the intervention of the Korean peninsula. They were thus related to one another, as to situation, rather as are the ports of our Atlantic and Gulf coasts, with the Florida peninsula intervening; or, even more emphatically, as San Francisco is to Norfolk. In this last case the scale is greater, as it is also in the Russian separation between the Baltic and their Far Eastern ports; but the result is similar. Water communication between the ports is made more difficult by the projection of land, which not only increases the distance between them but affords an obvious strategic position — near the point of Korea, or near the point of Florida, or, in the case of the Atlantic and Pacific, near the Canal — at which a hostile

fleet can wait in concentrated force, sure that escapers must come near them. This has been the case in all littoral warfare; capes are the points of danger just as salients are recognized to be. This is the precise opposite of the beneficial effect exerted by Long Island upon New York. The coast of the mainland there is a re-entrant angle, covered by the island as if by an earthwork. This enables the defense to concentrate before going out and embarrasses the enemy by the uncertainties of two exits.

On the same sea frontier all the fortified ports will form parts of the base of operations, which itself may be properly called a strategic line. Provision should be made for safe and rapid communication between the ports; for while dissemination may be necessary to rapid preparation, concentration is essential to vigorous execution.

In conformity with this statement, of the need to provide for safe and rapid communication between the ports of a maritime frontier, in order to concentrate the forces when the moment for action arrives, we find mentioned among the needs of a base of operations ashore that of free movement and transport of troops and supplies behind the actual front. The river Rhine affords an illustration. In case, as has happened more than once, that the French intended to invade Germany, their army would be on the west side, and they might or might not hold bridges. Whatever the state of the case, they would be able to move their troops, dispersed in cantonments, behind the Rhine, and concentrate them where they preferred, unseen and unknown to the enemy except through spies or treachery. Reconnoissance in force would be difficult, or impracticable. In such movements the river Rhine was called expressively a curtain — it concealed as a curtain does. Long Island Sound will afford similar advantages for the operations of a fleet, if the eastern end be fortified. As has already been suggested, Narragansett Bay could be included in the

scheme of a fortified base, the central natural feature of which is Long Island.

As a rule, however, this condition cannot be realized for the ships of a fleet. Their movement from port to port must, ordinarily, be made outside, that is, in front of the base; either directly or by following the coast-line, according to the degree of control possessed over the sea. The internal navigation behind the sea islands of the Southern States does indeed suggest an ideal frontier, in which ships of the heaviest draft could move behind the base from one port to another, as between the two entrances of one port, sheltered from attack by intervening land; but it is only an ideal. Such internal navigation, however, might be used effectually to keep clear a necessary belt of sea outside, by the facilities which it offers for the concentration and sortie of light vessels — of which the torpedo boat or submarine is the most probable — in such numbers as would make the enemy cautious about near approach. The precaution observed by the Japanese to remove their battleships from under-water attack, by holding them at a distance, enforced as it was by two severe disasters, is warrant for believing that torpedo warfare can be so utilized as to assure, in a military sense, the passage of single ships or small divisions from port to port of a threatened coast. The dispositions of the American fleet before Santiago in 1898 are not likely to be repeated.

A like facility for the operation of torpedo vessels would be given by shoals lying along a coast; either by the intricacy of the channels through them, or from their being everywhere impassable for heavy ships. The chain of islands bounding Mississippi Sound, continued by Chandeleur Islands and shoals, establishes a continuous system of navigation for small torpedo boats from the Passes to Mobile. Portions of the Cuban coast present similar features. If the Mississippi and Mobile were two points

of the American base of operations on the Gulf, the coast-line joining them could become a fairly secure strategic line of communication — by keeping numerous torpedo vessels moving there — in case the enemy's control of the sea forbade attempting a straight course. East of Mobile this broken ground ceases; but it is probable that the nearness of Mobile to Pensacola would enable the same character of defense to be extended as far as Pensacola.

A coast-line being regarded as a unit, a strategic line, having two or more important strategic points, it is clearly possible that the fleet for various reasons may not always be concentrated. Recent instances are usually most profitable to consider. The fleet may be divided by original mistake, as the Russians were divided between Port Arthur and Vladivostok. It may be divided by exigencies of preparation, of repair, as for docking, or by accidents of war. A disabled ship must get in where it can. After the engagement of August 10 the Russians so divided. Most returned to Port Arthur; one battleship went to Kiao Chau. After the Battle of the Japan Sea dispersal in several directions took place. The common result of a great victory is such separation of the beaten vessels, just as on land a really great victory is followed by a disintegration, which it is the duty of the victor to increase by the immediate vigor of his pursuit, disorganizing still further the shattered army. The recurrence of such conditions of separation is a permanent feature of warfare, of which strategy and tactics have to take account in all ages. The methods of successive eras will differ with the character of the instruments each has. Sail and steam possess very differing potencies; but the factors in the hands of the opposing parties are, or should be, the same in any particular age. Sails are not opposed to steam, for they do not co-exist. Sails meet sails only, and steam, steam.

The problem of uniting a divided fleet, or of getting a

separated ship safely to her main body may therefore be expected to recur; consequently the provision of methods to that end, by using the means of the day, is not of barren academic interest. Nor does the fact that the operation is very difficult, results doubtful, remove the consideration as impracticable. The very improbability of an effort has often been the cause of its success. In the case of a single armored ship, or of a small division, having to run for it in order to effect a junction with the main fleet in another port, the torpedo force could be assembled in such numbers as might be necessary to accompany the passage, which would commonly be made by night; for obscurity is a curtain that favors the weaker. Local familiarity, too, is a much stronger factor than the local knowledge given by charts, especially in the dark. This, and the choice of time, — all the elements, in short, — favor the local navy in such measures. This, however, is not to say that they involve no risk. War cannot be made without running risks. As for the torpedo force employed, all history, including the war between Japan and Russia, affirms the ease with which small vessels can proceed along their own coast, defiant in general of the outsider's efforts, though sometimes caught.

Off-lying obstacles to navigation are of strategic importance and may be looked upon as outworks: generally, however, coming under the head of defensive value. They rather keep off the enemy than facilitate offense. They played a conspicuous part off the coast of Holland in the old English-Dutch wars; but as the size of ships increased, the advantage for defense was more than compensated by the loss of offensive power, the Dutch ships of war remaining smaller and less weatherly than the French and English, owing to the shallower water in which they had to move at home. Consequently, the Dutch line of battle was weaker at any one point than the enemy's force brought

against it. The strategic value of the shoals, therefore, introduced an element of tactical weakness in the Dutch navy.

So far, the strategic points of a theater of sea war have been considered only with reference to that particular theater, — to their importance intrinsically, and to their relations to one another and to the fleet. The treatment of the subject would not be complete without a reference to the distance separating colonial possessions or outlying interests from a mother country, and to the effect of that distance upon their value to the holder. This is a branch of the subject which particularly concerns naval war as compared with that on land. The great military nations of the world being found almost wholly on the continent of Europe, with well-established frontiers, the distance of any point defended by them, or against which they move offensively in continental wars, is not very great, at least at first. There is also nothing on the Continent that corresponds to the common ground which all peoples find in the sea, when that forms one of their frontiers. As soon as a nation in arms crosses its land frontier it finds itself in the territory of a neutral or of the enemy. If a neutral, it cannot go on without the neutral's consent; if an enemy, advance must be gradual and measured, unless favored by overwhelming force or great immediate success. If the final objective is very distant, there will be one or more intermediate objectives, which must be taken and held as successive steps to the end in view; and such intermediate objectives will commonly represent just so many obstacles which will be seriously disputed by the defendant.

To push on regardless of such obstacles, and of the threat they hold out against the communications and lines of retreat, requires accurate knowledge of the enemy's condition and sound judgment as to the power of your own army to cover the distance to your distant objective, and to over-

come its resistance, before the enemy can bring his own resources into play. This amounts to saying that the enemy is known to be much inferior in strength for the time being, and that you have good hope of striking him to the heart before he is ready to use his limbs and weapons. Thus struck at the very center of his strength, with the sinews of his military organization cut, the key of his internal communications perhaps seized, and concerted action thus hindered, the enemy may, by such a bold and well-timed movement, be brought to submit. This is the aim of modern war, and explains the great importance attached to rapid mobilization.

In naval operations such successes are wrought less by the tenure of a position than by the defeat of the enemy's organized force — his battle fleet. The same result will follow, though less conclusive and less permanent, if the fleet is reduced to inactivity by the immediate presence of a superior force; but decisive defeat, suitably followed up, alone assures a situation. As has been remarked before, the value of any position, sea or land, though very real, depends upon the use made of it; that is, upon the armed forces which hold it, for defense and offense. The sea is not without positions advantageous to hold; but peculiarly to it, above the land, is applicable the assertion that the organized force is the determining feature. The fleet, it may be said, is itself the position. A crushing defeat of the fleet, or its decisive inferiority when the enemy appears, means a dislocation at once of the whole system of colonial or other dependencies, quite irrespective of the position where the defeat occurs. Such a defeat of the British navy by the German in the North Sea would lay open all English colonies to attack, and render both them and the mother country unable to combine effort in mutual support. The fall of any coast position in the Empire would become then a question only of time and of the

enemy's exertions, unless the British navy should be restored. Until then, there is no relieving force, no army in the field. Each separate position is left to its own resources, and when they are exhausted must succumb, as did Port Arthur; and as Gibraltar would have done in 1780 but for the navy of Great Britain, which was its army in the field. On the other hand, so long as the British fleet can maintain and assert superiority in the North Sea and around the British Islands, the entire Imperial system stands secure. The key of the whole is held, is within the hulls of the ships.

This is not to say that a powerful, although inferior, navy may not by successful evasion and subsequent surprise seize positions, one or more, in a distant part of the world, and there, so to say, entrench itself, to the discomfiture of the opponent and possibly to the attainment of some distinct ultimate national advantage. The importance yet attached to local bases of operations in remote regions, as for instance by Germany to Kiao Chau in years still recent, might prompt such an attempt. The question then would arise whether the superior naval state would be willing to endure the protracted contest necessary to expel the intruder. General Grant in the spring of 1863 feared that the people of the United States would be discouraged to the point of ceasing the war, if from his operations around Vicksburg he fell back upon Memphis, to take up a new line of advance, which was the course General Sherman urgently advised. This is one of the problems of war, the calculation of chances. Napoleon once said that the art of war consists in getting the most of the chances in your own favor. The superior fleet holds the strongest suit, but the strongest suit does not always win. The character and the skill of the player against you are important factors. For such reasons, the study of the chances, both in general elements of war and in the concrete cases

of specific regions, is necessary; in order to fit an officer to consider broadly and to determine rapidly in particular contingencies which may arise.

Readiness and promptitude in action will of course give great advantages in such attempts, as they do in other military operations; and for the matter of that in all affairs of life. There is, however, a recognizable difference between the power of a great state either to attack or to defend a distant and isolated dependency, however strong, from which it is separated by hundreds or thousands of miles of sea, and the power of the same state to support a similar post in its interior or on its own frontier, whether sea or land. The defense of Gibraltar, for instance, would be easier to Great Britain if it were on the British coast. Quebec fell in the Seven Years' War, but during the same period no such mishap occurred to French home fortresses. Rochefort, it is true, might have fallen in 1757 if greater promptitude and enterprise had been shown by the British; but the result would have been of the nature of a successful raid, achieved by surprise, not a permanent tenure consequent upon prolonged operations, as in the case of Quebec.

Other things being equal, the greater the distance the greater the difficulty of defense and of attack; and where there are many such points, the difficulty of defense increases in proportion to their distance, number, and dissemination. The situation of a nation thus encumbered, however unavoidably, is the reverse of that concentration, and maintenance of close communication, which are essential conditions of correct dispositions for war. As was said to Rodney in 1780 by the head of the British Admiralty, the navy cannot be in force everywhere. Some points must be left without the immediate presence of the fleet; and in such circumstances an enemy who has his ships well in hand may by prompt action seize one and so establish

himself that he cannot be dislodged. Minorca was thus snatched from Great Britain in 1756, the fleet under Byng failing to dislodge the enemy's fleet before the garrison surrendered; and the French held the island during the remaining seven years of war, although the British navy continued superior. The place, however, could have been recovered by arms, if Great Britain had thought worth while after her fleet had regained full freedom of movement, which it did before the war was over. The end was attained equally surely and much more cheaply by the capture of Belle Isle off the French Atlantic coast, in exchange for which Minorca was returned at the peace. Malta was seized in like manner by Bonaparte in 1798; and, though France had no navy in the Mediterranean, both it and Egypt were held for over two years, when the French were ousted by the British only after prodigious exertions.

The weakness and inconsistency thus brought upon a nation as a whole by the tenure of remote maritime regions or stations must be felt, of course, in due proportion by each of the outlying possessions; which will, by so much, be less secure than equivalent possessions held by a nation whose outposts are nearer to it or less scattered. As compared to the latter, the former is forced to a defensive war at sea, because it has more to lose, the other more to gain; and in accepting the defensive it loses the advantages of the initiative, which are the property of offensive war. This chiefly constitutes the military problem of Imperial Federation, which for several years has been agitating the British Empire. Australia, New Zealand, South Africa, and Canada are self-governing dependencies of the United Kingdom. Each feels that, like Minorca and Malta in their day, it cannot itself alone cope at sea with several possible enemies of Great Britain. Formal independence, as an alternative to the existing self-government, would leave each to its own unaided resources against any one of

those enemies; and while it is probable that entire subjugation, that is, conquest and permanent tenure, would be too onerous to attempt, the cession of a particular harbor or district might be exacted, or other commercial or naval advantages, as the price of peace.

Great Britain and France did not besiege Sebastopol because they desired to acquire the place. They attacked there because they thus put Russia at the utmost disadvantage in the matter of communications as compared with themselves, forcing her to defend a maritime fortress at a point distant from the center of national power; as remote then, perhaps, as the recent war in Manchuria has been under the changed circumstances. Having won the victory, they gave back the place, but exacted in return conditions of a different character. The United States did not invade Cuba to acquire the island, but to force Spain to yield conditions not otherwise obtainable. Should the United States have trouble with Japan, and the United States navy be beaten, it is improbable that Japan would seek to annex any part of the American Pacific coast; but she might demand Hawaii, or free immigration of her laborers here, or both. Hong Kong, Kiao Chau, Port Arthur, Formosa, are instances of similar exactions; and the United States' tenure of Guantanamo Bay, though not similarly invidious, illustrates naval strategy availing itself of circumstances in order to obtain advantages of position. The British colonies are thus exposed to be attacked, to the harassment of war, in order to obtain concessions of one kind or another. Under several possible contingencies an enemy's division not only may reach their shores before a British pursuit, but the British may feel it not wholly expedient to pursue, lest the detachment so weaken the home fleet as to render doubtful the security of the British Islands themselves. This is a question of comparative numbers and margin of safety.

Such was the position of Great Britain during the War of American Independence and through the earlier part of the wars of the first French Republic and Empire, and is now. Although other nations, notably France, have very greatly increased the extent and dispersion of their colonial empire as compared with former times, and thereby have multiplied the points at which they are open to attack, their holdings generally have not the economic development, and few of them the commercial value or the national and military importance that attaches to several of the British dominions, colonies, and stations. The very multitude and ubiquity of British maritime possessions, whatever the advantages they have brought with them, hitherto and now, in the way of advancing trade or providing bases for warlike action, were and are a source of danger, of distraction to the defense, and of consequent weakness. There can be no certainty when or where a blow may fall. A French naval officer, speaking of Great Britain's immense naval development alongside of the widespread disposition of her attackable points, has truly said, "England, in the midst of riches, felt all the embarrassment of poverty." The brilliant victories of the Nelsonic period, — the Nile, St. Vincent, Trafalgar, — the overwhelming destruction dealt to the enemies' navies, have obscured the fact that the war, whatever its motive on the part of England, was defensive in its military character, and that to France, despite her maritime weakness, belonged the advantages of the offensive. The British fleets off the French coast stood in the first line of the defense; waiting, longing, it is true, for the opportunity to fight, because in battle they knew was the best chance of destroying the fleets which threatened either their home or their colonies. But still, in attacking, they but defended the country's interests on and across the sea. Their success, however, by the protection afforded to the entire Empire, emphasizes the fact that the suprem-

acy of the fleet was in itself the tenure of the decisive position.

Lord Kitchener, in his visit to Australia and New Zealand in 1910, is quoted as writing in a memorandum to the local governments,

"It is an axiom held by the British Government that the Empire's existence depends primarily upon the maintenance of adequate and efficient naval forces. As long as this condition is fulfilled, and as long as British superiority at sea is assured, then it is an accepted principle that no British Dominion can be successfully and permanently conquered by an organized invasion from over-sea."

But in applying this principle to Australasia, he remarked that considerations of time and space cannot be disregarded. He showed that concentration of force in one or other theater may be compulsory for the navy; that in other seas (than that of the concentration) British naval forces may remain temporarily inferior to those of an enemy, and that some time may elapse before the command of these other seas can be assured. He considered it therefore the duty of all self-governing dominions to provide a military force adequate to deal promptly with an attempt at invasion, and thus to insure local safety and public confidence.[1] The whole argument applies with equal force to a community of self-governing States like the American Union, wherein the Atlantic and Pacific coasts, not to speak of outlying responsibilities, are separated by distances quite as determinative as that between Great Britain and Australasia.

It will be observed that the successful British strategy of former days consisted in stationing competent divisions of the fleet before the enemy's dockyards. Thus Antwerp, Brest, Rochefort, Toulon, with the intervening Spanish

[1] *The Mail* (Tri-weekly Times), April 18, 1910.

ports when there was war with Spain, indicated a strategic line of operations occupied by the British navy with twofold effect. The occupation prevented the juncture of the enemy's divisions from the several ports; thus stopping concentration, the great factor of effect in war. This result was defensive, and for the whole of the then existing British Empire; the colonies as well as the United Kingdom. Offensively, these main positions covered and supported a blockade of the whole hostile coast. I recall to you these well-understood conditions, in order to draw attention to the fact that, now that Germany has taken the place of France and Spain as the dangerous naval power, exactly the same conditions are found to recur. The British fleet is concentrated in the North Sea. There it defends all British interests, the British Islands, British commerce, and the colonies; and, offensively, commands Germany's commercial sea routes.

If we take a particular very striking instance of sudden seizure of an important position, Bonaparte's Egyptian expedition, which may fitly stand as a type of numerous others directed against England or her colonies, it is seen at once that France is on the offensive, England on the defensive, notwithstanding the brilliant attack and complete victory won at the Nile; the most complete, probably, in the annals of naval war. Bonaparte's phrase to his army, "Soldiers, you are one of the wings of the army of England," — that is, of the army meant ultimately to invade and reduce England,— was pregnant with truth; nor is there good reason to doubt the reality of his intentions directed against India, or that there were fair military chances of success.

In perfect keeping with his bold system of making war, he had marked the decisive point and pushed directly for it at a moment when there was a strong probability that the enemy would not be ready to stop him before he had reached

and seized his object. At the time he sailed, the British had only three ships-of-the-line in the Mediterranean. The reason of this bareness of British force was that France did not stand alone, but had been joined by Spain. The superiority in numbers of the combined navies, localized in the Mediterranean, had compelled the British fleet to withdraw and concentrate in the Atlantic; producing a situation similar for the moment to that indicated by Lord Kitchener, and followed ultimately by the results predicted in his memorandum, when the British fleet, having established control in the Atlantic, returned to the Mediterranean. The condition would be reproduced if Austria now should enter into an offensive alliance with Germany when in war with Great Britain. I mention this because people are prone to think that with steam and wireless and all modern inventions the past cannot recur in essential features; all of us concede that it cannot recur in details. From 1793 to 1795 Spain was in alliance with Great Britain; from 1796 to 1800 she was her enemy. Austria is not now the enemy chiefly feared by Great Britain; but it will be to Austria's interest to see Great Britain out of the Mediterranean, for Austria has great inducements to acquisition within it. Austria and Germany cannot be said to have common objects; but they have a common interest in supporting one another, and their particular objects will be best furthered by coöperating with each other in world politics.

The geographical position of Egypt has given it always unique strategic value, and its political condition in 1798 made a successful seizure in every way probable. Situated at the crossing of many roads, — by land and sea, — opening to Europe by the Mediterranean, and to the Indian Ocean by the Red Sea, a moment's thought will show that Egypt holds to the East and West a position like that which the defile of the Danube held to the battle-ground between Austria and France, or the Valtelline passes to the

Spanish communications through Germany to the Netherlands in the seventeenth century; in a word, that upon political control of Egypt might well depend the control of the East by a nation of western Europe. To strike at India itself was not at once possible; but it was possible to seize, in Egypt, one of those intermediate objectives before alluded to, and there wait until so securely established as to be able to push on further. As the Archduke advancing from Bohemia would secure first the valley of the Danube and then move on to the Rhine, so, advancing against India, France would first seize Egypt and then advance towards the East. Between Egypt and France there was then another important point, another intermediate objective, Malta; to take which Bonaparte paused on his way, notwithstanding the need for haste. The final failure of the expedition must not be allowed to obscure the fact that France was attacking Great Britain, that the latter was doubtful of the object of the expedition and distracted by the numerous points she had to cover, and that French control was successfully established and maintained for a measurable time in the two most important points, Egypt and Malta.

It may be mentioned here that, although in so narrow a sea as the Mediterranean, the greatest perplexity is shown in the correspondence of Lord St. Vincent, the British commander-in-chief, and of Nelson, as well as of the Admiralty, as to the aim of the expedition. Naples or Sicily was thought most probable; and in one of his letters Nelson says, "Malta is in the direct road to Sicily," explaining that it would be most useful as an intermediate base.

So far, this attempt against India, Great Britain's greatest and most distant dependency, had succeeded. Here, however, the difficulty of the French enterprise began. It proved feasible to advance to and accomplish the end in view, if once clear of the harbor and the enemy; but when

this had been done no fatal injury had yet been dealt the British, and the French, as towards Great Britain, were forced from the offensive to the defensive. Their conquest must be secured, and its communications with home established, if it was to be effective for further progress. Bonaparte's plan had been sagaciously drawn on the lines of a military operation; it broke down at the point wherein its conditions differed from those of land warfare. Bonaparte, to quote a French author, never attained "le sentiment exact des difficultés maritimes." The army had advanced into the enemy's country; it had seized its first objective; but the blow was not fatal, and its own communications were in deadly danger. There was no relieving force to throw in supplies and reinforcements, as to Gibraltar twenty years before, because the hostile navy controlled the intervening country — the sea. By a combination of genius and good fortune, France had projected its military power to a great distance across the sea and had seized two distant and defenseless stations on a great highway. Could she keep them? We know she did not; the probabilities are she could not; yet she did hold them so long as to justify the attempt made. Once in Egypt and Malta, the French force passed from the offensive to the defensive. The troops in these two outposts became garrisons with no army in the field. The communications between them and with home were closed; and however long the occupation might endure, it was fruitless, except as a diversion to the enemy's forces, unless the enemy wearied of the strife, which at one time already Great Britain had done. Although the unlucky result was hastened and plainly foreshadowed by the Battle of the Nile, it probably was in any case inevitable, in the respective conditions of the two navies, which Bonaparte failed to realize. The whole undertaking from beginning to end illustrates Lord Kitchener's comment on present-day con-

ditions. There is the enforced absence of the British navy due to contemporary military and naval conditions, occasioned by the events of the war in the years immediately preceding, and there is the disastrous ultimate result as soon as the superior navy recovered its freedom of action.

There is also an instructive analogy of outline between Bonaparte's Egyptian expedition and his celebrated land campaign in Italy, 1796, two years earlier. In 1796 he advanced with similar celerity from the Riviera of Genoa, one hundred and twenty miles, to the line of the river Adige, which, with its controlling fortress Verona, he reached and had secured within two months. From several conditions, mainly topographical but not necessary here to enumerate, the Adige with its bridgehead Verona constituted a strategic center, intermediate between the Riviera of Genoa whence Bonaparte started, and Vienna which was his ultimate objective. It thus bore to the campaign the relation which Malta bore to Egypt; but the natural advantages of the position were qualified by the artificial condition constituted by the fortress Mantua, west — that is, in rear — of the Adige, which was occupied by a very large Austrian garrison. While this held out, Bonaparte's tenure of the Adige region was incomplete and insecure. Hence his progress was arrested, as at Malta, by the necessity of mastering Mantua, which flanked his line of advance into Austria, just as Malta flanked the line to Egypt. Mantua detained him eight months, but he maintained a controlling army in the field, as Great Britain at the later period had the controlling navy in the Mediterranean; the mobile force in each case ensuring the communications. When Mantua fell he resumed his march, as he resumed his voyage after Malta; but the success he afterwards achieved, momentous as it was, he himself attributed in part to the fact that Austria weakened, which Great Britain did not do as to Egypt,

although some of the British representatives did. "Had the Austrians instead of making overtures for peace continued to retreat," Bonaparte said, "they might have worn down my force." That is just what happened in Egypt and in Malta. The French force in them was worn down.

Since these lectures were written the war between Japan and Russia has afforded a similar instance. Port Arthur was the Malta of Russia and the Mantua of Japan. Russia in the strategy of peace had projected her national power to Port Arthur, far distant from the center of her strength, and there established herself. When war came she was unable to sustain the communications, by either land or sea, as the French in Malta. The place therefore ultimately fell; but the menace of the fleet within to the communications between Japan and Manchuria necessitated the reduction of the fortress, to effect which there had to be a very large detachment from the force available against the main Russian army in the north. From the beginning of the war the Japanese advanced rapidly till they reached Liao Yang, but there they were held for six months, mainly by the siege of Port Arthur, advancing but thirty-five miles. After the fall of the fortress they made preparations to resume their advance, as Bonaparte after Mantua; but the Russians intended to retire, and were collecting their strength as they fell back upon their base. At this conjuncture mediation took place. The difficulty before the Japanese was the same as before Bonaparte when he was advancing towards Vienna; and though they did not sustain the bluff which he did, they acted as he counselled the Directory, "Don't overreach yourselves by grasping at more than the conditions warrant."

The failure of France to maintain her hold in Egypt and Malta, which she had conquered, as well as in other distant points which she held before the war, was paralleled by the inability of Great Britain to keep her colonies in the War

of American Independence; not merely the colonies on the Continent but in the West Indies, and to some degree in India and Africa, as well as in Minorca, which fell after a six months' siege. This failure was due to the distance, to the number and distribution of the several positions, which led to scattering the forces, and to the fact that, despite her fine navy, the alliance of the French and Spanish navies was thought, erroneously, to be too strong for her. The extent of the losses of either nation at different times shows the large deductions that must be made from the strength of a strategic position, even as affecting the immediate theater of war, in consequence of its distance from the home country. The great advantage of nearness to the latter is apparent in itself and from these instances. This was the greatest advantage of Japan over Russia in their recent war, and is the advantage which Japan still possesses over all other nations for action in the western Pacific. The center of her national power is close by the scene of possible international contentions in that which we know as the Far East. This will be the advantage possessed by Austria in the Mediterranean should she succeed in pushing her political tenure through the western Balkan peninsula to Salonika and the region round about, — a progress resembling that of Russia through Siberia and Manchuria to Port Arthur, and feared by Italy and Russia, whose jealousy of such a future was shown by the interview of their sovereigns at Racconigi.

Rapid distant expeditions, then, are more feasible by sea than by land, because of the greater mobility of navies; but they are also less decisive in their effects than an equal success won in the mother country or over the fleet, because the blow is delivered upon the extremities and not at the heart. They are also harder to sustain than to make. Once launched and away, if the secret has been well kept there may be good hope of a pursuing fleet

taking a wrong direction, though scarcely of the objective being surprised in these days of cables and wireless. But when the immediate object of the expedition has been accomplished, the assailant passes from the offensive to the defensive, with its perplexities; and to maintain his conquest he must control the line of communications, that is, the sea.

It should be noted, also, that for the immediate success which is essential to final success, such distant maritime expeditions can hope only when there is no effectual opposition to be feared at the point of landing; while ultimate success depends upon there being no interference by the enemy's fleet after landing. This was shown at Sebastopol and at Port Arthur. In neither of these instances was adequate opposition to the landing made, and in neither did the enemy's fleet afterwards trouble effectively the communications of the besiegers. During the War of American Independence, although France and Spain took many small islands from Great Britain, as well as the distant and weak Pensacola, they did not succeed against Jamaica or Gibraltar. At Minorca the result was different; because, although to reduce the island required six months, the British could spare no fleet in that quarter to intercept the expedition, as they did for Jamaica, or to molest the siege, as at Gibraltar. Jamaica was saved by Rodney's victory over the French fleet at the moment it sailed for the attack, in result of which no landing could be attempted. At Gibraltar resistance could not be made to the enemies establishing their lines on land, for they controlled the land; but the British fleet continually interfered by throwing in supplies, and the siege consequently was unsuccessful.

All consideration goes to show that the supreme essential condition to the assertion and maintenance of national power in external maritime regions is the possession of

a fleet superior to that of any probable opponent. This simply reaffirms the principle of land warfare, that the armies in the field, not the garrisons, are the effective instruments of decisive war. The occupation of harbors militarily secure, although valuable and even necessary, is secondary to the fleet. Having in view the particular question now interesting us, — the possession of strategic positions in remote regions, — and accepting fully Napoleon's maxim that "War is a business of positions," we may safely coin for ourselves the strategic aphorism, that in naval war the fleet itself is the key position of the whole. Pertinent to this, it may be noted that the Japanese in the recent war began by landing much of the supplies of the fleet at their protected permanent base in the Elliott islands, but later, as an administrative expedient, found it better to keep a large part afloat. That which is afloat can be kept in vessels capable of accompanying the fleet, which thus carries its base with it, and so can occupy a convenient harbor, though unfortified, its own strength affording for the moment the necessary protection. Efforts for maritime military efficiency therefore must be concentrated on the fleet; but at the same time, as a matter of correct professional thinking, let us avoid the extreme of the Blue Water School, and bear in mind that a fleet charged with the care of its base is a fleet by so far weakened for effective action — weakened both strategically and tactically.

Fortified bases of operations are as needful to a fleet as to an army, but the selection and preparation of them must be governed by certain evident principles.

First, the number of points to be seriously held must be reduced as much as can be, so as to drain as little as possible the strength of the mother country, and to permit her to concentrate on those of vital importance; all others must take their chance with guns pointing seaward only. If the enemy be wise, he will not waste time and strength

on them. On the other hand, the vital points should be most seriously strengthened and garrisoned. If the enemy take the offensive he does so against the whole system, and each point that is attacked should be prepared to hold out for the longest time its natural advantages will permit. Every day it does so is gained for the common defense. A very serious effect might have been produced on the Union forces and general campaign if Forts Jackson and St. Philip, below New Orleans, at that very critical period of the war, in 1862, had held out as long as they might have done. The resistance of Port Arthur weakened seriously the Japanese main advance, by the number of men necessarily employed in the siege, and so gained strength and time for the whole Russian scheme of operations. If the early stages of the resistance had been more successful in holding the besiegers at a distance, Rozhestvensky when he arrived might have found the Port Arthur fleet still in existence. The French garrison of Genoa in 1800 marched out an array of skeletons, but their hardihood had gained Bonaparte the time to place the army in the field across the Austrian communications with home. On a smaller scale, Ladysmith played a similar rôle in the Boer War.

A nation that has numerous scattered maritime positions should therefore carefully study how many she can maintain, and which they should be; while, on the other hand, one which sees a necessity arising for establishing her power, or preparing for its future assertion, in a particular region, should as diligently inquire what directions her efforts should take for securing strategic and tenable ports. This, for instance, Germany recently did in the instance of Kiao Chau, and the United States in those of Hawaii and Guantanamo.

Second, there is an evident order of consequence among the various ports which may constitute the maritime system of a particular nation. In the case of all states the home

ports come first; because the possibility of a country being thrown on the defensive always exists, and self-protection not only is the first necessity of a nation, but constitutes also the basis upon which alone can rest external action, near or remote. Not till national power is consolidated at home can expansive activity take place. To assuring self-defense succeeds the maintenance of the national policies, in their relative degrees of importance. As these may vary from age to age, the value of ports will vary also. Nevertheless, at any particular epoch there will be a national policy more or less clearly formulated; and the remoter ports, which are essential to the fleet's part in this, should be regarded together with the home ports as a whole, a system, not merely as isolated positions.

Thus, to take the chief maritime state of modern history, — Great Britain. At the opening of her real career as a naval power Holland is the enemy, and the great dockyard is at Chatham. To this, now that Germany has become the rival naval state, the new position Rosyth, with Chatham, correspond. To antagonism against Holland succeeded alliance, the two states sharing in the universal combination against Louis XIV. Military policy then drew Great Britain to the Mediterranean, whither commercial interest had already drawn her navy in support of the merchant ships. The occupation of Tangier and its development by fortification and mole were an abortive first fruit of British interest in that sea; but the successive acquirements of Gibraltar, Minorca, Malta, emphasized that the Mediterranean had become the first object of Great Britain's policy, after self-protection in home waters was provided. All these three were fortresses in the strict sense of the word.

As the eighteenth century advanced, British interests in the Mediterranean remained, but became secondary to those in the West Indies and in North America. The business

of the old "Turkey merchant," as he used to be called, took rank beneath the sugar of the West Indies, the rice and tobacco of the American continent, the furs of Canada, and the fisheries of Newfoundland. Jamaica, which in my judgment has the most controlling situation in the Caribbean, we may infer to have been strongly fortified and garrisoned, from the extent of the preparations for its reduction made in 1782 by the allied nations. France had become the enemy, and so remains through the century. This condition is emphasized at home by the growing importance of Portsmouth and Plymouth as dockyards; but the continental colonies of Great Britain, now embraced in the United States, seem to have had only seacoast defense. This is a tacit recognition that they are already too strong in population, as in extent, and too distant, for conquest by a foreign nation, provided the British navy maintained the superiority at sea which it had throughout. Louisburg and Quebec are fortified by the French and garrisoned against siege, just because the population of Canada is so little numerous, and the French navy so inferior, that neither by land nor by sea is their security assured. Their fall emphasizes one consideration in fortification too easily overlooked; namely, that a fortified place, when it passes into the hands of an enemy, transfers to him the advantage, not only of the situation, but of the strength of the works also. If a colonial port thus falls, it is to be desired that it should not also afford immediate artificial protection against recapture from the land side; as Quebec, for instance, did in 1760, in the winter following Wolfe's victory. The deduction from this is, that in places which justify fortification both the works and the garrison must be adequate to all probable exigencies.

During the periods mentioned, British national policy developed coincidently with almost constant war. Hence, the scheme of fortified stations rather grew than was studied;

in this much resembling the British Constitution. The United States has had little war, and her external policies have developed unaffected by that military atmosphere which insures unconscious preparation. As regards conditions changing, it may be interesting to recall that when the lectures which constitute the body of this treatment were first written, the armored fleets of the United States, of Germany, and of Japan, did not exist; that Cuba, Porto Rico, and the Philippines were still Spanish, and Hawaii an independent community. It may be added that the General Board of the navy had not been constituted, nor the Joint Board of Army and Navy Officers.

It would be inappropriate to discuss here in detail a scheme of fortified ports for the United States, for the obvious reason that the boards just mentioned are doubtless dealing with the matter, with a thoroughness and an extent of information not here available. But some general strategic considerations may be summarized.

First of all, what is the essential military requisite of a naval station? Evidently that it should be useful in war. Now, in these days, when it takes at least two years to build and equip a battleship, it is evident at once that shipbuilding cannot be reckoned a primary military object in a navy yard. If ships built in a navy yard are better, or cheaper, or built more rapidly, those are good industrial or economical reasons; but none of them is a military reason. The highest function of a navy yard is to maintain the fleet in efficiency in war; and especially to restore it in the shortest possible time when suffering from injuries, whether arising from ordinary service or in battle. No utility in peace will compensate for the want of this in war. The selection of particular sites to serve this end should be governed by this one consideration, of usefulness in war; which may be analyzed, as we have before, into Position, Strength, and Resources. Of these resources, the chief one is copious

provision for docking rapidly; and a site that lends itself to this is to be preferred to one that does not, even if there be some advantage as to situation or natural resources. Evidently the differing degrees in which the three requisites may exist will complicate decision, but it need not and should not be complicated by considerations of building ships.

This applies to all chief naval stations, whether on the home coasts or abroad. At home each coast frontier should possess two such naval stations; one of which may be chief, the other secondary in development. As regards stations external to the home country, the number and choice of them depends upon the national policy. If such policy fasten on interests near home, as in the Caribbean, the development of a naval station there may be conditioned by the proximity of the home ports. In the War of Secession, for example, Port Royal, Key West, Pensacola, and New Orleans were all naval stations, but of very limited development. The character of the war, the enemy having no fleet, allowed vessels to be sent to the Northern dockyards for repair, the force at the front being maintained by reliefs.

Some system of reliefs is needed for every force; but it will be realized that docking at least should be possible at a less distance than from Mobile to Norfolk, or to New York, and this facility must be insured, when attainable. The War of Secession was one of very numerous vessels of moderate size, little homogeneous, and essentially not concentrated except on rare occasions of battle; the time for which was at the deliberate choice of the one side possessing a navy. Where fleet is opposed to fleet, each of a limited number of large ships, it will be very urgent that a vessel or vessels spared for repairs should not have far to go nor long to wait.

When these lectures were first written the United States

had but one external policy, properly called policy, — the "Monroe Doctrine." She now has two, the second being the "Open Door." Doubtless external relations bring up many kinds of questions, the treatment of which by the Government proceeds for the most part on certain established principles. These principles, because ascertained and fixed, may be styled policies; but they apply to special and occasional incidents, and therefore have not the continuous influence attaching to the two named. These depend upon conditions so constant and so determinative of national attitude, as well as essential to national well-being, that they have formative effect upon national opinion and steady influence upon diplomacy. The Open Door, which in usage indicates equal commercial opportunity, is intimately associated locally with the question of Asiatic immigration to America. Asiatic immigration again is closely linked with the Monroe Doctrine, for it has become evident that Asiatics are so different from Europeans that they do not blend socially. They live side by side, but as separate communities, instead of being incorporated in the mass of the population. Consequently a large preponderance of Asiatics in a given region is a real annexation, more effective than the political annexations against which the Monroe Doctrine was formulated. Hawaii is an instance in point; and the well-known objections of Japan to the political attachment of Hawaii to the United States would undoubtedly have gone further, if more imminent questions had not commanded her attention. Free Asiatic immigration to the Pacific coast, in its present condition of sparse population, would mean Asiatic occupation — Asia colonized in America. This the United States Government cannot accept, because of the violent resistance of the Pacific States, if for no other reason.

This combination of facts, resulting in a national policy, imposes naval stations in the Pacific, just as the entrance of

the Mediterranean into the sphere of British interests compelled the gradual acquisition of stations there. While the Monroe Doctrine was the sole positive external policy of the United States, as contrasted with the negative policy of keeping clear of entanglements with foreign states, national interest gradually but rapidly concentrated about the Caribbean Sea; because through it lie the approaches to the Isthmus of Panama, the place where the Monroe Doctrine focusses. This was the condition when these lectures were first written. The question of the Pacific and its particular international bearings was then barely foreshadowed and drew little attention. Now, for the several reasons stated, the Pacific possesses an actual immediate importance; indeed, the shifting of interest may be compared to that which in the latter half of the eighteenth century made the western Atlantic, from Canada to Venezuela, overpass the Mediterranean in the appreciation of British statesmen. The Mediterranean did not thereby cease to be important; it only lost the lead. In the same way the Caribbean remains important; perhaps it has not even quite lost the lead, but it is balanced by the Pacific. The approaching completion of the Panama Canal will bring the two into such close connection that the selected ports of both obviously can and should form a well-considered system, in which the facilities and endurance of each part shall be proportioned to its relations to the whole.

Finally, the maintenance of any system of maritime fortified stations depends ultimately upon superiority upon the sea — upon the navy. The fall of a wholly isolated strong post may be long postponed, but it is sure to come at last. The most conspicuous instance is the celebrated three years' siege of Gibraltar, from 1779 to 1782. All attacks against the Rock were shattered to pieces; but it must have fallen, save for the energy and skill of the

British navy in throwing in supplies. The active army in the field, let us say, relieved the besieged fortress.

An immediate corollary to this last proposition is that in war the proper main objective of the navy is the enemy's navy. As the latter is essential to maintain the connection between scattered strategic points, it follows that a blow at it is the surest blow at them. There is something pitiful in seeing the efforts of a great naval force, with the enemy's fleet within its reach, directed towards unimportant land stations, as was the case with the French fleet under D'Estaing in the West Indies during 1778 and 1779; or even against important stations like Gibraltar, to the exclusion of the hostile fleet. The service of the fleet and of the ports is reciprocal; but, except the home ports, they have more need of it than it of them. Therefore the fleet should strike at the organized force of the enemy afloat, and so break up the communication between his ports.

CHAPTER IX

FOUNDATIONS AND PRINCIPLES

Distant Operations and Maritime Expeditions

NOTWITHSTANDING the difficulty of maintaining distant and separated dependencies, a nation which wishes to assure a share of control on any theater of maritime importance cannot afford to be without a footing on some of the strategic points to be found there. Such points, suitably chosen for their relative positions, form a base; secondary as regards the home country, primary as regards the immediate theater.

The principle laid down by military writers, that an army advancing far from home should establish a second base near the scene of operations, on the same principles that determine the character of the first, and with sure communications knitting the two together, holds good here; only it must be remembered that secure communications at sea mean naval preponderance, especially if the distance between the home and the advanced bases be great. Such secondary bases should be constituted on the same principles as those of the home frontier; that is, it is expedient that there be two fortified ports, of which one only need be of the first order. They should be near enough to yield each other support, but not so near as to allow the enemy to watch both effectively without dividing his main fleet. In 1803 to 1805 the British fleet under Nelson, watching Toulon, thus had at its disposal both Malta and Gibraltar. These not only shared in supporting the fleet, but each supported the other by dividing the burden of protecting

the long line of commercial communication from the Channel to the Levant. If the Russians in the years preceding the late war had sent their entire fleet to the Far East they would have outnumbered the Japanese and rested upon Port Arthur and Vladivostok. The Japanese, on the other hand, would have had the advantage of the Inland Sea and its several exits for combining unexpected movements.[1] A port like Kure, on the Inland Sea, with two or more entrances widely removed from one another, has the advantage of two ports combined with the advantage of activities concentrated in one. When two ports are possessed, as in these instances, the base of operations comprising two or more points may be thought of as a line, like the home coast frontier. The ideal condition is that the ports should be in communication by land as well as water. Ports in the large islands, Cuba, Haïti, Jamaica, would possess this advantage, for example, Santiago, Cienfuegos, Havana; but two ports in any one of the Lesser Antilles would be too near together. They would be practically a single port.

If the given theater of maritime war be extensive and contain many points susceptible of strategic usefulness, the choice among them becomes important. If a point be central its influence is more evenly distributed, and from it all parts of the theater are more easily reached; but if its influence does not extend to the boundary lines of the area in question its communications with home are endangered. Thus Jamaica, from its central position, is one of the most important points in the Caribbean; but if Great Britain were confined to Jamaica the communications from home, passing through the passages controlled by other nations, would be insecure. The same could have been said in 1798 of Egypt, relatively to France, though central as regards Europe and India, if without Malta or an equivalent;

[1] See map facing page 426.

and indeed, at times, notwithstanding the commanding position of Egypt, the British have felt uneasy as to their communications with it, although they have Gibraltar and Malta, both secure against a *coup de main* and giving shelter to their fleet. First in order among external positions are those lying on the side nearest the mother country; only when safe here can a farther step be sure. Gibraltar, for instance, may be considered a necessary first step to Egypt; Santa Lucia, a convenient half-way house, at the least, to Jamaica. Second in order, though first in importance on the particular theater, are the central positions; for example, Malta in the Mediterranean and Jamaica in the Caribbean. Those lying on the side farthest from the nation interested, however important, are most exposed, for example, Egypt and Panama, and care should be taken to strengthen their communications with home by intermediate posts. Great Britain has a chain of such posts to India.

From all these considerations, it follows that when a government recognizes that the national interests in a particular region may become of such character as to demand military action, it should be made the business of some competent body of men to study the ground carefully, after collecting the necessary information, and to decide what points have strategic value and which among them are most advantageous for occupation. When such positions are already occupied, the tenure of the present possessor has generally to be respected, and the conditions under which it becomes right to disregard it are not within the decision of the military man, but of the statesman. It will be granted, however, that occasions may arise in which a state may exercise its rights of war in order to protect interests which it thinks vital; and that the control of a maritime region may become a necessity of the war, if not its prime motive. When this is the case, what are technically

called "operations of war" follow. The state may aim either at acquiring control, or at extending the control it already has; or, on the other hand, may seek only to defend that which is in present possession, by checking advances threatening to it.

If the aim be to acquire control not already held, the war becomes offensive in its motive and, necessarily, in its operations also. The military operations, however, may not be directed immediately against the object the acquisition of which is sought. It may be that the enemy is more assailable in some other point which at the same time he values more; and that by moving against this, the true object may be more surely reached than by a direct attack. The question here touches the entire conduct of operations. It is, for the belligerent government, analogous to that which presents itself to the commander-in-chief before every position from which he seeks to dislodge an enemy, — shall it be attacked in front, or turned? The former takes more strength, the latter more time. An illustration is to be found in the attempt of the French and Spanish to take Gibraltar from England during the War of American Independence. The attack was made direct upon Gibraltar — the strongest military post in the British dominions — and failed. The same amount of power directed against the English Channel and coast, and skilfully used, could scarcely, under the existing conditions of immense numerical naval superiority, have failed to wring from England the cession of Gibraltar. The conquests of a war are frequently valuable only as a means of barter in the treaty that ends it. The correspondence of the first Napoleon teems with instructions to this purport.

It may thus happen that the object of the war may not be the objective of the military plan. The object of the war, indeed, may not be the gain of territory at all, but of privileges or rights denied before; or to put an end to

wrongs done to the declarant. Even so, an attack upon some of the enemy's possessions will probably form part of the plan of operations.

The case before us is limited by our subject to the control of a maritime region, — a control to be either partial or total according to circumstances. To embark upon such a war with any prospect of success, a nation must have two conditions: first, frontiers reasonably secure from vital injury; and secondly, a navy capable of disputing the control of the sea with its enemy under his present conditions. The frontier, or coast, in its broadest sense, is the base of the whole war, the defensive upon which it rests, answering to the narrower base of operations from which a single operation of war starts. The navy is the chief arm by which the offensive is to be carried on; for, while in the defense the navy plays a secondary rôle, in offensive naval war it takes a leading place. Even in case of a large *combined* operation, the chief part is reserved to the ships; unless under circumstances when the enemy has none, and the work of the fleet is so found done to its hand, as at Sebastopol. To that scene of war there were two lines of communications: one by land wholly in the power of Russia, the other by sea equally controlled by the allies, the enemy having dismantled and sunk his ships. The case was therefore reduced to the siege of a great fortress absolutely undisturbed by fears for the communications of the besiegers. In the case of Gibraltar, in 1779–1782, the offense failed through the weakness or imbecility of the allied navies; had these been up to their work, the British fleet could not have thrown in supplies.

The question of waging war in a maritime region beyond the immediate neighborhood of the country so engaged is simply a particular case of general military operations. The case is that of maritime expeditions, in remote waters, where the country may or may not possess

already positions useful for the purposes of war; but where in either case it is proposed to make offensive movements, and to possess, or at the least to control, enemy's territory. Even though the leading object of the war be defense, defense is best made by offensive action.

The specific feature which differentiates these operations from others, and imparts to them their peculiar characteristic, is the helplessness while afloat of the army contingent embarked, — its entire dependence for security upon the control of the sea by the navy of its nation. Be it large or small, however efficient in itself in courage, discipline, and skill, it is paralyzed for effective action during the period of transit. The critical nature of this period, together with the subsequent risk to its communications, which depend continuously upon the same control, are the distinguishing elements to be borne constantly in mind while considering this subject.

A few cursory remarks on the leading features of such expeditions in general will first be offered; and then, for the purposes of illustration, two historical cases will be briefly described and discussed.

Having the two fundamental requisites already stated, a reasonably secure home frontier and a navy adequate to dispute control of the sea with the enemy, the next thing is to determine the particular plan of operations best suited to obtain your purpose. This involves the choice of a base, of an objective, and of a line of operations, — three things inherent in every operation of war.

Putting aside, as involving too wide a scope, the question of attacking the enemy elsewhere than upon the maritime region which you wish to control, the ultimate objective there should be that position, line, or district which in its influence upon the general situation may be considered the most important; to use a common expression, the key or keystone. If the particular region aimed at is decidedly

nearer to one of your sea frontiers than to the others the base of the plan of operations will be found there, unless prevented by other serious reasons, such as the lack of good harbors or established dockyards. Thus Great Britain, now that Germany has become the threatening naval power, demands another dockyard — pre-eminently a docking yard — on the North Sea, at Rosyth, additional to the one already possessed at Chatham. This evidently means that, as against the German coast and for operations in the North Sea, the British base is shifted to the North Sea from the Channel, defined by Plymouth and Portsmouth. So Austria and Russia have been pushing territorially towards the Mediterranean, because their other outlets thither, respectively at the head of the Adriatic and from the Black Sea, are too remote, and with communications to the sea too exposed militarily, to be satisfactory as bases of operations.

On the other hand, the United States possesses in its Gulf coast a base line distinctly nearer to the Isthmus and to the western half of the Caribbean than are Norfolk and New York, the two chief naval stations indicated by nature on the Atlantic Coast. Yet it is doubtful whether, with the great increase of size in battleships, and with the difficulties of docking in the Mississippi, the Gulf ports can provide an ultimate base of operations equal to those of the Atlantic; whether they will not rather constitute intermediate advanced ports, valuable as sources of supply because of their nearness, but inadequate to the greater repairs. At the same time, Guantanamo and Key West, in case of operations towards the Isthmus, offer such marked advantages on account of nearness and of mutual support that a secondary provision for docking in them would be highly desirable, and probably expedient. Some military risk must be taken; as is the case, for instance, with the British docks at Gibraltar, which under modern conditions are within range of the Algeciras shore.

The great arsenals define the position of the base line, and in large degree its length. Their local resources, of torpedo vessels and submarines, will tend to protect the seaboard between them, and also a little to each side, from the enemy's operations. The question of moving from the base thus fixed to the objective chosen involves the choice of a line of operations. In the open field of the sea the most direct route is the most natural, and, other things being equal, the best; but many circumstances may influence the decision. Paramount among these is the strength of the navy as compared with that of the enemy, — a strength dependent not only upon aggregate tonnage or weight of metal, but also upon the manner in which those aggregates have been distributed among the various classes of vessels and upon the characteristics of each class in point of armament, armor, speed, and coal endurance. All these qualities are elements in strategic efficiency, sometimes mutually contradictory; and the adjustments of them among themselves may seriously affect strategic calculations. This illustrates that the composition of a national fleet is really a strategic question. The known efficiency of the respective services, and the comparative distance of the belligerent countries from the objective point, which is assumed to be the same for each, — the one to defend, the other to attack, — will also influence the choice of the line of operations, because the length of the lines of communication to be guarded will materially affect the strength of the contestants. It is upon these lines, or belts of sea, that fast cruisers can specially embarrass the operation, compelling the employment of a large proportion of the fleet to check their movements. The shorter and the more numerous these lines, and the farther they pass from an enemy's ports, the greater the task of the enemy and the probable immunity of the lines.

As much of that with which we are about to deal, namely,

the advance of a great maritime expedition, — a body of ships of war convoying an army embarked in transports, — may not impossibly seem to some as talking in the air of a thing that never did happen or can happen, bear in mind that it did happen in 1798, under the greatest general of modern times, and that the expedition was pursued by a fleet of about equal size under Nelson, one of the greatest admirals of all time; also, that the questions here raised must have been subjects of careful thought at that time to both Napoleon and Nelson. As to such a thing never happening again, consider the evident future importance of the West Indies and the Caribbean Sea, regarded as approaches to the Isthmus, and through the Isthmus to the Pacific Ocean, in its full extent; also the shortness in time of the distance between any two points in the Caribbean. Remember continually the smallness of that sea, that its length is but one-half that of the Mediterranean, so that great expeditions may well happen there under circumstances peculiarly favorable to such enterprises.

Where a navy is largely preponderant over that of an enemy, such over-sea expeditions by large bodies of troops proceed in security, either perfect or partial. Great Britain during the Napoleonic wars had troops continually afloat, often in large bodies. So did the United States in the Mexican War and the War of Secession. So France in her conquest of Algiers in 1830, and again Great Britain and France during the Crimean War. Security such as existed in these instances leaves little of a military problem; but the case differs when there is an approach towards equality, even though the superiority of one be distinct and emphatic. Vastly superior though the British navy was to the French in Napoleon's time, its tasks were so numerous and onerous that, to quote again, it could not be in force everywhere, and there was always the chance that a hostile division might fall in with an important convoy. Pro-

tection localized with the convoy, that is, a body of armed ships in company, was therefore necessary, and the force of these armed ships was proportioned to the importance of the enterprise. It is necessary in this day of ours to remember that the convoys did sail to and fro, and that they were thus protected, fortified, so to say, by armed vessels; for the Blue Water School, or Fleet in Being School, hold that they ought not to sail at all while the enemy's fleet exists in the neighborhood of the line followed. Such convoys of troops were despatched by both belligerents during the War of American Independence, when there was a substantial equality between the opposing navies.

With a navy much superior to that of the enemy, — after allowance made for the length of the line of operations which has to be secured, — it is permissible to strike at once for the coveted objective; the sooner the better. If in so doing you pass by a strategic harbor held by him, capable of sheltering his ships, — a position from which he may with some probability intercept your supplies of coal or ammunition, — this position will require attention to the extent of reducing to manageable proportions the injury possible to it to do.

Thus Jamaica and Santiago lie close to the Windward Passage, which is the direct route from the United States Atlantic ports to the Isthmus; and Cadiz and Gibraltar lie close to the necessary route of all vessels bound from the Atlantic into the Mediterranean. The military characterization of such positions is that "they flank the route." If they harbor ships of war, the route must be protected by force so constituted and so stationed near the port as to check the movements of the ships within. Such a detachment involves exposure to the vessels composing it, in case the enemy has a fleet superior to it anywhere within steaming range. Thus, when the French Brest fleet, in 1799, appeared suddenly in the Mediterranean, the British

were divided in several bodies, with more than one of which it might have dealt effectively in succession and in detail. Detachments also entail upon the main body a reduction of strength; but not necessarily, nor always, to such a degree as to arrest progress to the objective. Owing to the variety and importance of British interests, military and commercial, and their wide dispersion, Great Britain in former times found her maritime routes thus flanked in many places by many ports, — by Brest, Rochefort, Ferrol, Cadiz, Toulon, as well as in remoter seas. She met the difficulty by detachments before each, commensurate to those within. The continuousness of this disposition, and the more important military effect it produced in preventing the several hostile divisions from uniting for offensive action, tend to obscure the fact that these various sea positions were thus watched and checked; exactly as a general on shore guards his line of advance against the dangers from a fortress, the position of which threatens his communications in case he is not able to reduce it.

A disposition has been shown lately to cast doubts upon the effect of flanking positions upon lines of communication, as compared to the effect of fortification concentrated upon the objective to which the communications lead. There is no need for such comparison, for no contradiction between the two exists. That Malta can exercise a powerful influence upon the communications of an expedition from a western Mediterranean country acting in Egypt, does not contravene the value of military force in Egypt itself, mobile or fortified. In 1813, Wellington held in Portugal the impregnable fortified position of Torres Vedras, securing against land attack his sea base at Lisbon; yet the puny force of American privateers acting off Cape Finisterre seriously harassed his communications with the British Islands.

If such a point, on or near your line of operations, now

become that of communications, — that is, on the line which it was safe for your battle fleet to follow, though not safe for transports, — can be avoided, by making a circuit through waters wholly out of its sweep and nearly safe, your line of communications may be changed. It may be that the character of the port or the known number of its war-shipping will allow the opening of that line from time to time, by convoying transports in large detachments throughout the whole of the more exposed part of the line. Thus the great convoys which at long intervals relieved Gibraltar, 1779–1782, were protected by fleets of battle-ships.

There are two modes by which the supplies of a fleet may be sent forward: one by single supply ships taking their chance, depending upon the routes they follow being controlled by the patrols of their own navy; the other by large convoys under the immediate protection of a body of armed ships. It is probable that both modes will be used; the convoy system being the dependence for the main supply, supplemented by the occasional single vessels. The convoys must be heavily protected, because their sailings should be watched and their destruction attempted by the enemy as one of the regular secondary operations of war; it will therefore be expected to fight a battle for their safety. Single ships must depend upon their speed, upon choosing routes with a view to avoiding danger, and upon the general police of the seas by ships of the cruiser class. Whatever the particular mode adopted, two or more lines of supplies converging toward the objective or toward the position of the fleet are an advantage; more so, perhaps, to a stream of single vessels than to large convoys, as the latter, in any case, must be guarded and so weaken the fighting force. The United States is preparing to fortify the Isthmus, and consequently to garrison the fortifications. It seems evident that, in case of hostilities, it will be ex-

pedient that supplies proceed from both the Gulf and the Atlantic, as well as from the Pacific.

A fleet operating some distance from home should not depend upon a single line of supplies. It may be said, generally, that while concentration is the proper disposition for the fighting force, or for preparation for battle, the system of supplies should not be concentrated upon a single line, when avoidable. This statement is, in effect, an application of one of Napoleon's brief, pithy sayings, quoted by Thiers: "The art of war," he said, "consists in the skill to disperse in order to subsist, yet in such manner that you may quickly concentrate in order to fight."

If the reduction of force, by watching an intermediate port, is necessary and also reduces you to an equality with the enemy; or, while leaving you still superior, takes away the chance of overcoming the resistance of the objective before the arrival of adequate relief, then the force should not be divided. Either the wayside port must be taken, or, if you think you can get on with your present supplies until a decisive action has been fought, you may continue on, abandoning your communications for the moment, — cutting loose, as the expression is, from your base and leaving the hostile flanking port nothing on which to work its will. So serious a step, of course, must not be taken without a certainty that the great essential, fuel, will not fail. Without ammunition a ship may run away, human life may be supported on half rations, but without coal a ship can neither fight nor run.

If, as is assumed, the objective is a part of the land, a port or island in the possession of the enemy, the conquest may not immediately and necessarily give the decisive control of the war that a like acquisition on shore may give; because the necessary and limited lines of communication, which often center in such a key to a land region, possession of which conveys absolute mastery, have few ex-

act parallels at sea. This is due to the fact before alluded to and patent to a glance, that, owing to the open character of the ocean, shipping can take many routes to avoid passing near a particular strategic position. A strategic position on land derives much of its importance from the fact that armies are forced to follow certain roads, or incur disproportionate disadvantage by taking others. It is true that there are some near parallels now; as, for instance, Gibraltar. The Russian navy of the Black Sea may be absolutely checked by the possession of the Bosporus or Dardanelles; and it is conceivable that if one great sea power controlled the shores of the North Sea, while another about equal lay along the Channel and Bay of Biscay, the holding of the Straits of Dover by one would seriously embarrass the movements of the other. A canal like Suez is equally such a point.

These instances, however, are exceptional; the power of the keys of maritime regions is like that of the key of a shore theater of war in kind, but falls short of it in degree. The historical instance before cited, the seizure of Egypt and Malta by Bonaparte, precisely illustrates the assertion. The key to the control of the East by the West was in the hands of the French, but they could not use it; nay, it was finally torn from their hands by the naval strength of their foes. What, indeed, is the good of holding the point where roads cross, if you can neither use the roads yourself nor hinder your enemy from using them?

Therefore, if successful in seizing the objective at which you have aimed, by being beforehand with the enemy,—thanks either to better preparation for war, or greater activity of movement, or by being nearer the seat of war,—you cannot think your conquest secure until you have established your naval superiority, and thereby your control of the roads which connect you with home, and also of those the nearness of which to the position you have just

taken give it its importance. This superiority *may* be established, it is true, by the conquest itself, the loss depriving the enemy of a necessary naval base and perhaps of a considerable part of his ships; more generally it will arise from your fleet being superior in numbers or quality to his. The same remark is evidently true concerning positions already held before a war breaks out; as, for instance, the Panama Canal Zone and Hawaii, the ultimate retention of which will depend upon the strength of the fleet. It must be remembered that the Monroe Doctrine is not a military force, but only a political pronouncement.

If decisive naval superiority does not exist, you must get ready to fight a battle at sea, upon the results of which will probably depend the final fate of your new gain; as the destruction of the French fleet at the Nile followed Bonaparte's first success, and annulled it. Admiral Togo's signal to his fleet off Tsushima, "The fate of the Empire depends upon this day's work," though primarily an appeal to patriotism, was ultimately and simply a particular application of the general military truth here enunciated. Japan by readiness, skill, and promptitude had projected the national power across sea, forestalling the action of Russia, as Bonaparte that of Great Britain. She had conquered a secure foothold in Korea and Manchuria, and had seized Port Arthur, as the French had Egypt and Malta. The positional keys of the situation were in her hands; but the defeat of Togo's fleet would have annulled all previous successes, as that of Brueys by Nelson did the achievements of Bonaparte. Conversely, Russia also at the same moment had projected Rozhestvensky's fleet, in like manner, close to the position she coveted to attain, accompanying it with convoy and coal destined to further future operations; but within easy range of her point of arrival she had first to fight a battle, in which fleet, coal, and convoy went down to a common destruction.

It may, indeed, very well be that the inevitable battle would have to be fought before instead of after the fall of the position. If the land defenses against which your expedition is moving were weak or in decay, while the enemy's fleet was nearly equal to your own, it would be the duty of the latter to attack you, hampered as you may be in such an expedition with the care of transports and supply ships, and at some distance from the port. Much more will this be the case if the enemy is moving to a home port, from which you aim to debar him, as Togo did Rozhestvensky.

If Nelson, in 1798, could have come up with Bonaparte, he should and would have attacked at sea, for doing which he had made systematic preparation; and, if successful in his assault upon the ships of war, he would have effectually stopped the expedition. In 1759, when large preparations were made in France for the invasion of England, and again in 1795, when it was proposed to send eighteen thousand troops from Toulon for the reconquest of Corsica, it was argued by the French authorities that the fleet should first fight that of the British, because this, being equal to their own, must be got rid of in order to make the passage safely. It must be noted, however, that the inferior skill of the French generally, and of the French admiral in particular, were the principal reasons that the French ministers of marine thus urged on the occasions named.

In such combined expeditions, the question whether the fleet and the convoy should sail together, or the convoy be held till control of the sea is decided, is difficult and disputed. It will be better to offer certain considerations for reflection, rather than to make sweeping dogmatic assertions. It seems evident that much will depend upon the distance of the proposed objective. In contemplated invasions of Great Britain, as by the French in 1759, and by

Bonaparte in 1803–1805, or, as is often conjectured, by Germany now, the nearness of the objective, and consequently of the expected naval battle, insures that knowledge of the result will be so speedy that no valuable time need be lost in following up a victory by the transit of the land forces. The enemy will not have opportunity to reconstitute his means of resistance. Consequently there is no adequate reason for exposing the troops beforehand, to share the disaster if the fleet meet defeat instead of victory. Napoleon therefore, in 1805, held his army in leash at Boulogne, awaiting the six hours' control of the Channel which he hoped from the presence of his fleet. As said, the same course had been prescribed in 1759.

But if the object be remote, as Egypt was from France, or as Panama is from the United States or Europe, or Hawaii from every part of the Pacific shores, it may be urgent that landing follow victory quickly, lest the enemy recover his breath in the long interval needed for the troops to come. In such cases, the subsequent landing is one incident, and a very important incident, to following up a victory properly; and it seems entirely congruous to all general principles to say that the means for so following should be at hand. That is, the convoy, the troops, should be with the fleet, in numbers at least equal to the immediate task of seizing a position, and holding it till reinforced. This again is entirely in accord with the methods of crossing a river in face of an enemy. The crossing of the sea is simply a much magnified instance of crossing a stream. It may be that the accompanying troops should be proportioned only to that immediate work, of holding a position till reinforced; but the question of proportion, of numbers, is one of detail chiefly, not of principle, and will be affected by many other details. Naturally, one determining detail would be the desirability of not exposing too many troops to capture upon a defeat of the ships of war.

Again, nearby invasions may be divided into those on a great scale, major operations of war, and those which partake of the character of diversions. The latter may naturally accept risks greater, proportionately to their size, than would be proper in the graver undertakings; because the total hazard is not so great, nor will failure be so disastrous. Chances may be taken with a boat which would be unjustifiable with a ship, and with a ship that would be indiscreet with a fleet. Strategically, the success of a diversion, although it may be eminently contributable to the success of a war, is not vital to it, as is the success of the great main advance. Great expeditions, invasions in force, must have a solid sustained character, which, while demanding rapidity, imposes also a graduated advance, a well-knit system, in which each step presupposes others, and the whole a permanent sustained action, like the invasion of France by Germany in 1870. Diversions, particularly maritime diversions, presuppose rather a momentary action, or at most one the prosecution of which depends upon the turn events take. For them, therefore, all the means of action need to be immediately disposable, in order that the whole may proceed with instantaneous development when the objective point is reached; and this means that the troops must accompany the fleet. The procedure of Great Britain abounds with illustrations of the troops accompanying the fleet. Such were the numerous expeditions against West India Islands, as that against Havana in 1762, and others in the French Revolutionary Wars, and that against the French in Egypt in 1801. These were distant expeditions, on varying scales of size, but in all navy and army sailed together.

Instances from British practice, however, are less illuminative than they would be if the British navy had been less preponderant. More convincing is the action of Hoche, a really great general, in the expedition against Ireland in

1796. His army had been fixed at twenty thousand men, though not so many went. It was to form the backbone of what it was hoped would prove a general Irish revolt; that is, its final procedure would depend upon the turn things took in Ireland. In any event, it would be only a diversion, however influential; but for its success it was imperative that the landing of the troops should follow instantly upon the fleet anchoring, and accordingly they went with it. In 1690 the French contemplated an invasion of Great Britain. It was to be a diversion only, counting on an insurrection in favor of James II. The fleet sailed without the troops. It won a marked victory at Beachy Head, forcing the allied English and Dutch fleets out of the Channel; but the troops were not at hand and the victory was not improved.

As a rule, a major operation of war across sea should not be attempted, unless naval superiority for an adequate period is probable. The reason is that already given, that the main movement of a war should be closely knit by steps linked one with another, which cannot be if the navy cannot command the sea. But promising diversions are permissible even with an inferior navy, the deciding consideration being whether the prospect of gain reasonably overbalances the probable losses from a failure. Where navies approach equality, as in 1690 and during the War of American Independence, the practice generally has been that small bodies of troops are sent out by both sides, without hesitation, under appropriate convoy.

The choice of position in which the defendant fleet would seek to find and fight such expeditions while on their way belongs to the province of strategy. Nelson returning to Europe from the West Indies in 1805 announced to his captains that if he met the allied fleet, of which he was in pursuit, twenty ships to his own twelve, he would fight them; but not, he said, until near Europe,

unless they gave him a chance too tempting to be resisted. I do not know that he gave any reason for this purpose as to place. I infer that, against such odds, he would keep in company watching for an opportunity; but that, if none favorable offered, he would fight in any event, because, as he said afterwards, and had said before, "by the time they have beaten me soundly, they will do England no more harm this year." This is a sound strategic motive. The invading force being tied down to one route, or at least to a few, the choice of where to fight will remain in the defendant's hands to a certain extent, depending on his knowledge of the invader's movements.

To illustrate: If Nelson had known where the French fleet was bound in 1798 before the Nile, and could have selected his point of attack, it would have been best to choose it near Egypt; because, in case of reverse to the French, he could destroy their force more entirely at such a distance from France, whereas, if he himself were beaten, the British cause would not be materially worse off because of the distance. The same reasons which lead one party to wish a certain position for fighting, if well founded, should determine the other to avoid fighting there, if possible. Generally, it may be said that the farther from his home base the invader can be made to fight, the better; but this must be tempered by the thought that a small or partial success won close to the objective might not prevent the expedition from landing. Suppose the case of an expedition from Cuba against Santa Lucia. Probably, in the case assumed, the fleet of the defendant, acting offensively, however, as becomes a navy, should try to fall in with the expedition midway and harass it on its course, — a proceeding for which it will have a decided advantage in its freedom of maneuver, having no transports to care for. Such harassment and abiding an opportunity would be precisely the course proposed by

Nelson, and, as he also intended, should end in a resolute attack at a point sufficiently far from that of the enemy's destination. The manner of the attack belongs to the province of tactics.

Whether it comes before or after the seizure of the objective, a battle must be fought if a decisive naval superiority does not already exist; and if it does, that superiority must be energetically used to destroy every fragment of the enemy's shipping within reach. The question of naval inferiority need not be discussed; for no such distant expedition as that we are considering, unless it be only a diversion, is justifiable in the face of a superior fleet. When Bonaparte sailed for Egypt in 1798 with thirteen ships-of-the-line, the British had but three in the Mediterranean, although the activity of Nelson enabled him to overtake and pass the expedition after reinforcements reached him. Even so, the British fleet was slightly inferior in force to the French. On the other hand, the French expeditions to Ireland, in the same year and in 1796, failed entirely; through a variety of causes, it is true, but due ultimately to naval inferiority, which forced them to take for the attempt the stormiest time of the year, as most favorable to evasion, and so involved them in disaster. Had a better season been chosen, the effect of British naval command would have been only more direct, and so more apparent. Do not understand this comment to imply condemnation of the particular undertakings. They were projected only as diversions, and appear to have been properly conceived, tested by the standard before advanced; namely, that the reasonable prospect of advantage overbalanced decidedly the probable losses through a failure.

On its way, therefore, such an expedition keeps together as much as possible. It is, for the time, free from care about communications, inasmuch as necessary immediate

supplies accompany it. Its anxieties, then, are not strategic, but tactical, — how to protect the fleet of transports, and at the same time maneuver in the face of an enemy, if encountered. Lookout and despatch service is performed by the light cruisers; the heavy ships of the order of battle keep within supporting reach of the admiral and of the convoy.

This sustained concentration of the fighting ships is the primary vital condition. These must not separate, whatever other divisions may occur, or detachments become expedient. The French expedition to Ireland in 1796 might have effected its landing as certainly as did Bonaparte in Egypt two years later, if the military and naval commanders had stuck to the battleships, — had not separated from the fighting force. Bonaparte, perhaps instructed by this experience, kept himself with the admiral in the biggest ship of the line. The convoy of troops for Egypt was collected from several ports while on the way. When that for Civita Vecchia was expected, the French admiral submitted to Bonaparte a written order to detach four ships of the line and three frigates for its protection until it could join the main expedition. Bonaparte wrote on the order, "If, twenty-four hours after this separation, ten English ships of the line are sighted, I shall have only nine instead of thirteen." The admiral had nothing to reply. The incident affords a valuable illustration of the necessity of concentration of thought and purpose; or, to use Napoleon's phrase, of "exclusiveness of purpose" as well as of concentration of force. The admiral's conception was, that by dividing he would protect both the main convoy and the expected detachment. Bonaparte saw that instead of both being protected, both would be exposed to overwhelming disaster; for if the British met the detachment they would be thirteen to four, or, if the main body, thirteen to nine. The detachment would be no safer with four than with

nine, and in like manner the main body. The smaller, being for the moment unavoidably separate, must take its chance. The case is absolutely on all-fours with the proposition to divide our fleet between the Atlantic and Pacific, and with the Russian blunder of that character in the late war.

So long as the troops are afloat, the dispositions of the convoying fleet center around their protection, are tactical in character, and governed by the rules applicable to every force on the march when liable to meet the enemy; but when the objective is reached and won, the troops take care of themselves, the tactical dispositions of the fleet for them disappear, and there arises immediately the strategic question of the communications of the army, of the command of the sea, and of the disposition of the fleet so as best to insure these objects. An intermediate hostile port, like Malta, flanking the communications, may then draw upon itself the full, or at least the proportioned, effort of the fleet.

The treatment of our present theme thus far has been by statement of general principles, with only incidental illustration. There will now be cited at some length two historical examples of expeditions such as those under discussion. Separated as the two are by an interval of two thousand years, the lessons which they afford in common illustrate strikingly the permanence of the great general principles of strategy.

Sir Edward Creasy, in his "Fifteen Decisive Battles of the World," ranks among these the defeat of the Athenians before Syracuse, B. C. 415.[1] Whether the particular claim be good or not, this event certainly has a high value to doubting students of military history, by showing that, under all conditions of material or mechanical development, strategic problems remain the same, though affected by tactical difficulties peculiar to each age.

At the time in question, two centuries before the great

[1] See map facing page 230.

strife between Rome and Carthage known as the Punic Wars, Athens had a sea power which was to the world of that day tremendous and overwhelming. It extended over and wielded the resources of the islands of the Ægean Sea, and was strongly based on the coasts of the Dardanelles and the mainland of what we now call Turkey in Europe, whence the trade of Athens was pushed to the Black Sea and to the Crimea, then as to-day the center of a wheat country. During nearly twenty years Athens had been engaged in war with the combined states of the Peloponnesus, now the Morea, at the head of which stood Sparta. Lacking the insular position which has been at once the strength and safety of Great Britain, she had seen her petty land territory in Attica wasted up to the city walls by the far superior armies of the enemy; but she still held out proudly, based upon her great navy and her commercial wealth, — in other words, upon her sea power. By it she mastered and held two distant advanced posts upon the hostile coasts; one at Cape Pylus, now the Bay of Navarino, where the conjoined British, French, and Russian fleets, under Sir Edward Codrington, destroyed the Turkish navy in 1827, the other at Naupactus, at the entrance of the Gulf of Corinth. Both were valuable strategic points for making raids into the enemy's territory, and for intercepting the corn trade from Sicily, which island was peopled by Greeks of a race kindred to Sparta. Besides these, the island of Corcyra, now Corfu, was in strict alliance with Athens; and as in those early days the course of galleys bound from Greece to Sicily was to coast to Corfu, then across to the Iapygian Promontory, now Cape Santa Maria di Leuca, and thence to follow the Italian coast, the strategic worth of the island to those who controlled it is easily seen. It therefore was chosen as the point of assembly for the transports; but the great bond knitting together all the elements of strength was the Athenian navy.

This was the situation when, towards the year B. C. 413, Athens determined upon the conquest of Syracuse, the chief city of Sicily, as a prelude to the subjugation of the whole island. Of the many motives leading to this serious step, involving a reach over sea much exceeding any previous attempt, we are here concerned only with the military; and but incidentally with them, as our attention is called mainly to the expedition proper and not to the whole war.

The military reasons for attacking Sicily were, first, the fear that its Greek cities, being mainly colonies of a race antagonistic to Athens, would join with their fleets in the war then raging. If this fear was well founded, sound military policy justified, nay, demanded, an attack in force upon them before they were ready; for, if a junction were effected, they would seriously imperil the control of the sea, upon which the safety of Athens depended. The condition much resembled that of 1807, when the British Government seized the Danish fleet at Copenhagen, it having become known that Napoleon, in understanding with the Czar, proposed to compel the coöperation of the Danish navy in his general naval policy. The second reason was that Sicily, as fruitful then as in all ages, supplied the enemy with wheat, even as Athens drew her grain supplies from the Black Sea. The two together justified the undertaking from a military standpoint, if there was strength enough to succeed in it and to hold the chief seaports; and after weighing the blunders of the Athenian commander-in-chief as well as I can with an unavoidable lack of experience of the sea difficulties of that day, I am persuaded the sea power of Athens was equal to the task.

So much for the general military policy. Let us now examine the conditions of the particular field in which this expedition was to act.

Athens was on the side of Greece farthest from Sicily.

The Peloponnesus, the territory of her opponents, lay between it and her. She held the islands Cythera (Cerigo) off the south of the peninsula and Corcyra on the west, while by her sea power she controlled the other Ionian Islands and occupied the seaports Naupactus and Pylus. Along the south coast of Italy, which fleets would usually follow, every city was hostile or unfriendly, until on the Straits of Messina Rhegium was reached; but Tarentum and Locri, at the two ends of this line, — the one at the heel, the other at the toe of the boot of Italy, — were strenuously inimical. Messene, on the Straits of Messina, had passed from one party to the other, but was now held against Athens. Then came, on the east coast of Sicily, three friendly cities, beyond which Syracuse, the first objective, was reached. The misfortunes of the expedition never allowed a thought of a farther step.

The choice of Syracuse as the objective was accurate. It was the front and center, the foundation and keystone, of the whole system of danger to Athens from the western colonies. To strike at it direct was right, if the sea strength of Athens was as great as the event showed. In so doing, the expedition passed by the hostile strategic points capable of sheltering an enemy's fleet; but the leader had reason to think that, if unaided, they would not dare to act against him. He was right; their jealousy of Athens refused help, beyond water and permission to anchor, but no seacoast city dared to lift a hand against the power of the sea. The Athenians thus cut loose from their base, having force amply sufficient to crush Syracuse before help could come, depending, with reason, upon their control of the sea daunting the enemy cities near their communications. In fact, these hostile ports, except Tarentum, finally allowed the besiegers of Syracuse to be supplied from their markets, and thus became to them new bases of support, of resources.

This was what did happen. What might have happened — with the respectable though inferior fleet possessed by Syracuse, and under the strategic conditions, added to the tactical embarrassments inseparable from an expedition composed of ships of war and transports — is admirably set forth in a speech made by a Syracusan before the popular assembly of the city. This man, named Hermocrates, proposed to make active use of the strategic position of Tarentum, flanking the Athenian line of operations, by sending thither a fleet which would either deter the enemy by threatening his communications, or, if he persisted, would act offensively against them and the fleet as opportunity arose, — Nelson's opportunity, too tempting to be resisted. The speech of Hermocrates was as follows:

"There is one point more which, in my opinion, is more critical and important than all the rest; and although, inured as you are to domestic indolence, it may perhaps not gain your ready approbation, I shall, however, boldly recommend it. If all of us in general who are inhabitants of Sicily, or at least if only we Syracusans, with what other people we can get to assist us, would put out instantly to sea with all the ships we have in readiness; and, victualled but for the space of two months, if we would then give these Athenians the meeting either at Tarentum or at Cape Iapygia, and there convince them that before they enter the lists of war for the conquest of Sicily they must fight for their passage across the Ionian Sea, we would strike them with the utmost terror. We would infinitely perplex them with the thought that from a friendly port we sally forth to guard our outworks, for Tarentum will readily receive us; while they have a long tract of sea to pass with their cumbersome train, and must find it hard, through so long a voyage, to be always steering in the regular order. As their course must thus be slow, and must advance only in exact conformity to order, we shall have a thousand opportu-

nities to attack them. If, again, they clear their ships for action and in a body bear down expeditiously upon us, they must ply hard at their oars, and, when spent with toil, we can fall upon them;[1] or, in case fighting be not advisable, we have it always in our power to retire into the harbor of Tarentum.

"Thus, if the Athenians, in constant expectation of being fought with at sea, make their passage with but a small portion of their stores, they will be reduced to a great distress upon coasts which will afford them no supply. Should they choose to continue in their station," that is, to remain in Corfu, "they must be infallibly blocked up in it; should they venture a passage, they must unavoidably leave their tenders and storeships behind," because of the tactical embarrassment in the day of battle, "and as they have no assurance of a hearty reception from the cities of the coasts, must be terribly dismayed," for their communications. "It is my firm opinion that, amidst the great perplexity of thought which must result from these obstructions, they will never presume to set sail from Corcyra; or, at least, while they are agitating the forms of procedure and sending lookout vessels to discover our numbers and positions, the season of the year will be protracted to winter."

[1] In the tactical system of the Athenians, who were the most expert of seamen, dependence was placed upon their superior skill enabling them to charge the sides of an enemy's ship with the bow of their own, — the strongest part of a vessel to the weakest. For this maneuvering the rowers needed to be in full strength, — fresh. The Syracusans reinforced the bows of their galleys abnormally, to meet bow to bow, like two eggs testing strength. Their inferior skill could not insure this particular collision if the Athenian rowers, with their lighter handling vessels, were fresh. The Romans would not be affected by the fatigue of rowers, if they could reach the enemy; for then they made fast, and the fighting men, who were fresh, fell on. All these particulars are tactical; there is in each of them just as real tactical resource as in the American navy replacing eighteen pounders by twenty-fours in 1800–1812.

A further detail, affecting naval operations in the field of strategy as well as of tactics, is evidently deducible from this speech; namely, if the ancient fleets proposed to themselves to keep the sea for some time, as in this instance to make a straight course from Corcyra to Syracuse, they were forced to carry such a weight of provisions and water as brought them down in the water and rendered them slow and difficult in maneuvering. In other words, the strategic consideration of the route to be followed, whether as shorter or with reference to the friendly disposition of the coast skirted, involved also the tactical question of the efficiency of their fleets in the all-important point of speed and turning power. The same thought applies to overloading with coal when within tactical reach of the enemy, as Rozhestvensky did. It is also worth remarking that the excessive labor of the oar necessitated for the oarsmen an ample supply of nourishment, and especially of fluid in warm weather.

The salient and decisive features, however, in the plan of Hermocrates were: (1) The recognition of the strategic value of Tarentum, flanking the route the enemy must take, as do Jamaica, Gibraltar, Malta; and (2) the use to which he proposed to put this, by rapidly mobilizing the Syracusan or Sicilian fleets, and massing them on the flank of the Athenian line of advance in a position secured from attack. Here was, first, a threat the enemy could scarely venture to disregard; and, secondly, the preparation of the inferior navy for offensive action at a moment's notice, and upon the weakest yet most vital link in the enemy's scheme of operations.

In the proposition of Hermocrates, then, we have a true and fruitful strategic thought, with the modification due to tactical conditions, put forth two thousand years ago by a man who never heard the words "strategy" or "tactics" technically used, nor tried to formulate their laws. If,

however, any one is disposed to infer, from the accurate insight of this untaught genius, the uselessness of studying war as an art, he may be quickly set right by the coldness and insult with which the speech was received, and the vainglorious appeal to national self-sufficiency made by the opposition orator; a Grecian anticipation of "buncombe," which can be read in Thucydides. The advice was rejected with contumely, the result being the unopposed progress of the Athenians, and the consequent siege, suffering, and narrow escape of Syracuse, with the change of attitude before mentioned in her friends, the Italian-Greek cities. However many and mixed the motives of the Syracusan assembly, a knowledge of the principles of war might have given the true policy a chance; averting the ruin which nearly overtook the city, and would have overwhelmed it but for the imbecility of the Athenian general.

It should be added, however, that although the scheme of Hermocrates was not only sound, but the very best fitted to the conditions, it would not assure the certainty of Syracuse's safety, because she was much the inferior power. It was the most skilful thing to do; it secured the most numerous chances; but if the Athenian skill had been equal, the stronger must in the end prevail. Indeed, the transfer of the Syracusan fleet to Tarentum, as conceived by Hermocrates, illustrates aptly both the power and the limitations of a "fleet in being," of which we have heard and still hear so much. Tarentum would have fixed upon itself the Athenian attack, just because the hostile navy was there; as Port Arthur fixed the attention of the Japanese, and Santiago that of the United States in 1898. Syracuse would have been saved by the fleet, at least until Tarentum fell. The momentary safety of Syracuse would illustrate the influence of a "fleet in being"; its subjugation after the fall of Tarentum would show the limitations of such a fleet, which, by definition, is inferior.

This episode in the Peloponnesian War, for in result it proved to be no more, gives us all the conditions of a distant maritime expedition in any age. We have the home base, Athens; the advanced intermediate bases at Corcyra and other points, which played for Athens the part that Gibraltar, Malta, and foreign coaling stations have done and still do for Great Britain; the objective, Syracuse; the neutral, doubtful, or hostile country to be passed, across the Ionian Sea or along the coasts of Italy; the enemy's advanced post in Tarentum and sister cities; the greater naval power in Athens; the smaller but still respectable fleet of Syracuse; the difficulty of communications; the tactical embarrassment of a train of supply ships; the tactical difficulty of ships deeply laden for a long voyage, which exists in a degree to-day; the tactical difficulty of the fatigue of rowers, which has disappeared; the wisdom of meeting the enemy half way and harassing his progress; the danger of awaiting him at home on the defensive; the perception of a navy's true sphere, the offensive. All these broad outlines, with many lesser details, are to be found in this Athenian expedition, and most of them involve principles of present application. In fact, put this early galley expedition under a microscope and there is seen realized the essential leading features of every maritime invasion.

The attempt of the Athenians, though overwhelmingly disastrous in this issue, was justified, because they were by far the superior naval power, and therefore had the probability of operating over a controlled sea.

The same cannot be said for Bonaparte's Egyptian expedition of 1798.[1] Without attempting to analyze the mingled motives which determined the action of the French general, it is probable that he was swayed largely by his disposition to trust to the chances of war, as he so often did both before

[1] See map facing page 260.

EUXINE
(Black)
SEA
Bosporus
Dardanelles
Tarentum
Iapygium Prom.
Corcyra
ÆGEAN
SEA
Naupactus
Athens
Messene
Rhegium
Locri
SICILY
PELOPONNESUS
Syracuse
Pylus
Sparta
Cythera
CRETE
MAP FOR
ATHENIAN EXPEDITION
AGAINST SYRACUSE
B.C. 415

and after, and, for long, not in vain. Also, when the expedition left Toulon, there were but three British ships-of-the-line in the Mediterranean, while even of their presence he may well have been ignorant. There was, therefore, a very reasonable preponderance of chances that the landing could be effected before an interrupting force could come up. Once on shore he was not wholly unjustified in relying for further progress upon the resources of the conquered country and upon his own unsurpassed powers for war and organization; and there seems reason to believe that, by adopting for the fleet a course analogous to that recommended by Hermocrates, he might greatly have increased the perplexities of the British admiral, and by so far his own chances of success.

His foot firmly planted in Egypt, Bonaparte, having compassed his first objective and so far accomplished his offensive purpose, necessarily passed, as to Great Britain, to the defensive with an inferior navy. This was precisely the position of Syracuse in relation to Athens, and the question may be considered, "What use should he have made of his fleet?" Having supreme command of it as well as of the army, this care was constantly in his mind. There were many considerations, political and administrative, that must justly have influenced him; but from the purely military point of view his decision appears to have been about the worst possible.

Good communication with home was the one thing necessary to his final success; nay, to the very existence of the French army in Egypt. There was no doubt of its ability to subdue Egyptian opposition; but it was bound to suffer losses by battle and disease, and if it advanced, as it must, there was further loss by unavoidable dissemination of forces. The numbers needed frequent reinforcement. Certain supplies also must come from home, such as ammunition of all kinds and equipments for war, not to

speak of the moral effect upon the army of finding itself cut off from any probable hope of returning to France. There was, too, the possibility that the fleet, under favorable circumstances, might coöperate with the army; as, indeed, frigates did a few months later in the Syrian expedition.

The danger that threatened all this was the British fleet. No port nor number of ports along the line — as, for instance, Malta, which the French held — could keep communications open if that fleet were left untrammeled in its movements. It was now known to be in number approaching that of the French, although the French admiral continued in a state of blissful confidence about his power to resist it.

Criticism, always wise after an event, condemns as visionary Bonaparte's attempt upon Egypt, as it also has that of the Athenians against Syracuse. Having paid some attention to the matter, my own opinion is that, though the probabilities were rather against his success than for it, there were chances enough in his favor to justify the attempt. Much military criticism consists simply in condemning risks which have resulted in failure. One of the first things a student of war needs to lay to heart is Napoleon's saying, "War cannot be made without running risks." The exaggerated argument about the "fleet in being" and its deterrent effect upon the enemy is, in effect, assuming that war can and will be made only without risk. What a risk was run by General Grant when he went below Vicksburg, against which Sherman remonstrated so earnestly, or by Farragut when he passed the forts below New Orleans, leaving them in control of the river behind him.

The orders of Bonaparte were clear and precise, that the ships of war should be taken into the old port of Alexandria, if there was water enough on the bar; if not, the

admiral was to go to Corfu, then in possession of the French, or to Toulon. These orders looked first to the safety of the fleet; and next to keeping it, if possible, under Bonaparte's own control. The retention in Alexandria was open to two objections: the first, tactical in character, was that the fleet, though perfectly safe, could be easily blockaded there, and could with difficulty come out and form in the face of an active enemy; while, secondly, there was the strategic inconvenience that its presence there would draw the British fleet to the precise point where transport ships and supplies from France must converge. The French navy, in taking this position, would give up entirely its special properties, mobility and the offensive, — which Hermocrates was so careful to insure, — and for the purpose of keeping open communications with home would be as useless as it became after the Battle of the Nile. It is truthfully remarked by a French naval officer that, with the difficulty of exit, a fleet in Alexandria could be checked by an inferior force, which could fall on the head of the column as it came out of the narrow entrance.

The admiral disobeyed these orders, and for the worse. He anchored near Alexandria in an open roadstead, presenting to an enemy's attack no difficulties except hydrographic; and his dispositions to strengthen the defense were slothful and faulty. The question of engaging the enemy under way or at anchor was discussed in a council of war, where it was decided to await them at anchor; and the line of anchorage was established with that view. This decision, which, it will be noted, was tactical, not strategic, was as unfaithful to the true rôle of the navy as were the orders of Bonaparte for its strategic disposition. Tactically, the fleet was devoted by its commander to a passive defensive, giving up its power of motion, of maneuver, and of attack. Strategically, Bonaparte, in this

case, was relying upon the deterrent effect of the "fleet in being" upon Turkey.

It is, however, generally admitted that a strategic fault is more far-reaching than one of tactics, and that a tactical success will fail of producing its full effect if the strategic dispositions have been bad. We may therefore fasten our attention upon the strategic error. Had the result of the Battle of the Nile been favorable to the French, and the fleet been afterwards withdrawn into Alexandria according to Bonaparte's orders, there would have been no positive gain to the Egyptian expedition. In the supposed case, the French fleet would have gained an advantage over the British navy by inflicting upon an isolated detachment a certain loss, perhaps even a disabling loss; but the purpose of Bonaparte to keep it under his own hand at Alexandria would have rendered the success futile, because, wherever the French fleet was, it drew an equivalent British detachment with the force of a magnet, and before Alexandria such a detachment was in the most favorable position to intercept supplies coming from France.

Granting that the strategic disposition proposed was faulty, to what use should the fleet be put?

It is in a case of this kind that the helpfulness of principles clearly and strongly held is felt. It is a very narrow reading of the word "principle" to confine it to moral action. Sound military principle is as useful to military conduct as moral principle is to integrity of life. At the same time it must be conceded that the application of a principle to a particular case is often difficult, in war or in morals.

If the principle is accepted upon which Hermocrates acted, perhaps unconsciously, that the part of the navy in a defensive operation is to stand ready for immediate offensive action, and to threaten it, it is seen at once that a provision which looked only to its safety, while neutraliz-

ing its power of movement, such as shutting it up in Alexandria, was probably erroneous. If found there by the British fleet, it was caught in a vise.

If not in Alexandria, then where? Bonaparte named two alternative ports, Corfu and Toulon. As regards these, (1) the fleet could not have been shut up in either as easily as in Alexandria; (2) a larger force would have been needed to keep it in; and (3) a fleet employed in doing so would have been less able to stop the French communications with Egypt. At Toulon, it is true, the British fleet would have been at the strategic point whence supplies would in most cases start; but it is easier to get out of a blockaded port than into it, while, as for shutting up a large fleet, it was difficult for an enemy to keep close to Toulon in winter.

Corfu, however, Bonaparte's third alternative, offered very distinct and decisive advantages as a position over Toulon. A British fleet watching off that island would have been far removed from the direct route between Toulon and Egypt, — over three hundred miles, two days' sail at least, not to speak of the difficulty of receiving intelligence. The office of the navy as accessory to a defensive position, such as was that of the French in Egypt relatively to Great Britain, is to keep open communications by acting, or threatening to act, upon the offensive. This can only be done through its power of movement on the open sea, and by assuming an initiative suited to its strength whenever opportunity offers; for the initiative is the privilege of the offense. Keeping communications open on a given line means either drawing or driving the enemy off it. If not strong enough to drive him off, then diversion must be attempted, — by threatening his interests elsewhere and in as many quarters as may be, seeking to mislead him continually by all the wiles known to warfare. As with war in general, this is a business of positions, and

consequently the chief station of a force destined to exert such influence is a matter of prime importance. Corfu, though not without its drawbacks, fulfilled the conditions better than any other port then under French control, because the mere presence there of a French squadron detained the enemy's fleet so far from the vital line of communications. Malta, on the contrary, like Toulon, would have fixed the enemy on the very road which it was desirable to keep open.

Drawing away, or diverting, assumes that strength is inferior to the enemy's, as was then the case with the French navy, as a whole, relatively to the British. If, however, though weaker in the aggregate, you are stronger than a particular detachment encountered, it should be attacked at once, before reinforced. Such weak detachments commonly result from an enemy's fears for his exposed points; as, for instance, Brueys, as mentioned already, wished to make a detachment from his main fleet, because he feared for the safety of the troops from Civita Vecchia. Therefore the aim of the weaker party should be to keep the sea as much as possible; on no account to separate his battleships, but to hold them together, seeking by mobility, by frequent appearances, which unaided rumor always multiplies, to arouse the enemy's anxieties in many directions, so as to induce him to send off detachments; in brief, to occasion what Daveluy calls a "displacement of forces" unfavorable to the opponent. If he make this mistake, either the individual detachments will be attacked one by one, or the main body, if unduly weakened.

These movements are all of a strategic character or aim. If, as a result of them, a collision is effected with a part of the enemy's forces, — say in the proportion to your own of two to three, — a strategic advantage will have been achieved. In the action that should then follow the aim

will be to increase this advantage of numbers by concentrating as two to one, or at least in some degree of superiority on part of the enemy's ships. This, however, belongs to the province of tactics, or, more accurately, grand tactics.

Let us now apply these principles to the probabilities in the case before us. The facts were as follows: Nelson first appeared before Alexandria on June 28th, 1798, three days before Bonaparte. Not finding the French fleet there, he supposed he had mistaken its destination and hurried back to the Straits of Messina, anxious about Naples and Sicily. If during the month of July, while he was thus away, the French fleet had sailed as is here advocated, Nelson, on returning, would have found the following state of things: The French army ashore with its supplies out of reach; the transports and frigates in the port of Alexandria, equally inaccessible; and the enemy's fleet gone, on what errand of mischief he could not tell. To remain there with his whole force would be useless. To follow with his whole force would be correct by all principles; but if he did so, he left Alexandria open. The temptation to leave a blockading detachment, say two ships (he had then no frigates), would be very great.

Alexandria, however, was not the only port in the power of France and connected with the whole system of her Mediterranean control. At this moment she held firmly both Toulon and Malta; and Corfu with a grip which later on resisted for a certain time the attack of the combined Turkish and Russian squadrons. It was a matter of importance to her enemies that she should not strengthen herself in Malta and Corfu. All these four points, Toulon, Malta, Alexandria, and Corfu, therefore claimed the attention of Great Britain; yet all could not be effectually watched, so as to break up the communications with Egypt, without a dividing of Nelson's fleet which would

have made each fragment hopelessly weak. This was exemplified a year later, in 1799, when the incursion of the Brest fleet into the Mediterranean, before alluded to, found the British thus divided.[1] To the power of distraction thus in the hands of France is to be added the unprotected condition of England's allies or friends in Naples, Sicily, and Sardinia; all of which were open to attack from the sea. In short, the French fleet, until cornered, was facilitated in any operations it might undertake by the possession of several secure ports of refuge, well spaced and situated; and had besides large power to inflict injury, and to exact contributions and supplies from states committed to the side of Great Britain. Only a half-dozen years earlier the squadron of Latouche Tréville had compelled such acquiescence from the kingdom of Naples at the cannon's mouth.

It will be seen, therefore, that so long as the French had in the Mediterranean, ready for action, a compact body of thirteen serviceable ships-of-the-line, the number engaged at the Nile, a force slightly superior to Nelson's own, besides frigates, Nelson's fleet had several different objects, all of importance, demanding his attention. There were the four hostile ports just mentioned, the enemy's communications to Egypt, and the protection of Great Britain's allies. Besides all this there was the additional object, the French fleet. There can be little doubt that the genius of Nelson would have led him straight for the enemy's fleet, the true key to such a strategic situation. But not every admiral is a Nelson; and even he could not have stopped the communications effectually before he had found and beaten the fleet. After the battle of the Nile Nelson's ships scattered: some to Naples, some to Malta, some to Gibraltar, some before Alexandria. Such a dispersal

[1] See "Influence of Sea Power upon French Revolution and Empire," vol. i, p. 304.

shows sufficiently the exigencies of the general situation, but it would have been simply insane under the present supposition of thirteen French ships of the line compact in Corfu. In the positions taken afterwards, each of the small British detachments named did good service, and in perfect safety, having the enemy's fleet off their minds.

But if, instead of being at sea in the Mediterranean or in port at Corfu, the French fleet had been safely moored in the harbor of Alexandria, Nelson's task would have been simpler. The blockade of that port would have settled the communications and left him perfectly easy as to the fate of Naples and Sicily. Toulon lost most of its importance with the British fleet thus placed across the path of any reinforcements it might send; and Nelson from his fourteen ships could safely have spared two, if not three, for the blockade of Malta, which, however, could have been maintained by frigates. It will be remembered that in Alexandria the French fleet labored under the tactical disadvantage of having to come out by a passage narrow, so far as sufficiency of water was concerned, while the outsiders, during the summer, had a fair wind with which to approach. In other words, the French fleet would have to come out in column, in face of a resolute enemy able to deploy his vessels across its head and to fall upon the leading ships in detail.

It may be objected that the quality of the French fleet was so inferior that the suggested use of it as a cruising squadron could end only in disaster. There is some truth in such a statement; and there were also political and administrative reasons, as already admitted. If engaged in a criticism upon the management of the French navy under Bonaparte in its entirety, full weight would have to be allowed to these considerations. Using the case, however, simply as an illustration of strategy, as is here done, it is permissible to disregard them; to assume, as must be done

in an abstract military problem, a practical equality, where numerical equality is found. None but a hopeless doctrinaire would deny that circumstances powerfully modify the application of the most solid general principles; yet principles are elicited only by eliminating from a number of cases those conditions which are peculiar to each, so that the truth common to all becomes clear.

As regards the particular effect upon Nelson of such a use of the French fleet as here advocated, it must be remembered by us, who now see things with the facility of what our American slang calls "hind-sight," that if ever Nelson lost his head, was "rattled," it was when he at his first visit found the French not in Alexandria; and after all was over, he spoke most dejectedly of the state of his health, induced by "the fever of anxiety" through which he had passed. We now may dismiss lightly the contingencies here suggested; that great seaman felt their pressure and knew their weight. Besides, it may be said that if Nelson had missed the French twice more, or a few weeks longer, he might have lost his command, so great was the popular clamor over his first failure; and there was scarcely another British admiral at that time fitted to deal decisively with an equal enemy. Napier estimates the presence of Napoleon on a battlefield as equal to thirty thousand men; and it is no exaggeration to say that Nelson, for thorough dealing with an enemy's fleet, was equal to a reinforcement of three ships-of-the-line. The mere success of the French fleet in dodging pursuit and raising alarm might have cost Great Britain her most efficient sea-commander.

It may be further interesting to note that the course recommended by Hermocrates, and here suggested for the French fleet, is identical in principle with certain well-known instances in land warfare. When the allied Austrians, British, and Dutch were falling back through

Belgium before the victorious advance of the French in 1794, upon reaching a certain point they separated; the Anglo-Dutch retreating upon Holland, with the vain thought of covering it by direct interposition, while the Austrians took the road to Germany. Jomini ("Guerres de la République") shows that if, instead of this folly of separating, they had massed their entire force in a well-chosen position covering their communications with Germany, and to one side of the line leading to Holland, which was the objective of the French, the latter could not dare to pass them, leaving their communications open to attack. They must have stopped and fought a pitched battle upon ground of their enemy's own choosing before they could touch Holland.

This again, in 1800, was the principle dictating Bonaparte's order to Masséna to throw a heavy garrison into Genoa. The Austrians could not pass by it, could not advance in full force along the Riviera against southern France, while that garrison flanked their line of communication. They were compelled to mask the place with a large detachment, the withdrawal of which from the main body vitally affected the campaign. This again, in 1808, was the real significance of Sir John Moore's famous advance from Portugal upon Sahagun in Spain.[1] The threat to the French communications arrested Napoleon's advance, postponed the imminent reduction of Spain, gave time for Austria to ripen her preparations, and entailed upon the emperor, in place of a rapid conquest, the protracted wasting Peninsular War, with its decisive ultimate effects upon his fortunes. Napier shrewdly says that his own history might never have been written if Moore had not made the move he did.

But let it be remembered always that the strength of such dispositions lies not in the inanimate fortresses so much as in the living power of the men, troops or seamen, whose

[1] See map facing page 248.

purposes they subserve. To use Napoleon's phrase, "War is a business of positions," but not so much on account of the positions themselves as of the men who utilize them. Of this, the uselessness of Malta to the French in 1798–1800 is a conspicuous example. It flanked the line of communications from the West to the Levant; but, there being no fleet in the port, the position was useless, except as engaging the attention of a small British blockading force.

CHAPTER X

FOUNDATIONS AND PRINCIPLES

Operations of War

THE last lecture began with some cursory remarks on the subject of maritime expeditions in general, and then was illustrated by two special historical cases of such expeditions.

The length to which this illustrative digression went makes it necessary to recall that the question leading to it was this: What is the true strategic use to be made of the naval force when the key to a maritime region, or any advanced position of decisive importance in such a region, has been won by a combined expedition? The answer given was that, when such a success had been won, the particular expedition, having next to secure and preserve that which had been gained, passes from the offensive, with which it started, to the defensive, and that the true part for the navy to bear in such a defensive is the offensive-defensive. When the first objective is possessed, the navy, heretofore tied to the rest of the expedition, is released, the army assumes the defense of the conquest, or the further prosecution of the conquest, and the fleet takes charge of the communications, and so of its own element, the sea. But it can fulfill such a charge only by either driving or drawing the enemy's sea force away from the region in dispute or from the critical point of the campaign. If stronger, it will seek, and if possible compel, a battle; if weaker, it will try to draw the enemy away and to divide his forces by threatening other strategic points or vital interests. It should be noted that this is precisely the function of a

navy in relation to the defense of the home coast-line, if the nation be reduced to a naval defensive for the war.

The Emperor Napoleon in the early part of 1812 discussed a somewhat similar situation in land warfare, in a letter of instructions sent to Marshal Marmont, commanding in Spain that part of the French forces which lay about Salamanca and in face of the fortress Ciudad Rodrigo.[1] This, strong though it was, the British under Wellington had recently captured by an operation which in its swiftness resembled rather a *coup de main* than a siege. Western Spain, bordering Portugal, was a region which the French had seized and from which the British sought to dislodge them; for the French at this period were reduced to a defensive attitude in Spain, owing to the approaching war with Russia, which had led the emperor to concentrate the most and the best of the troops at his disposal upon the great Russian expedition.

The borderland of Spain and Portugal thus corresponded to our maritime region: belonging to neither party, occupied by one, sought by the other. There were in it two principal fortresses, answering to fortified seaports, — Ciudad Rodrigo in the north and Badajoz in the south, both of which had been occupied by the French. Upon the tenure of these depended control of the region. By a rapid movement Ciudad Rodrigo had been taken from them, as just said. Badajoz had been threatened also; it was one of the two keys to the frontier, and now the only one remaining to France. Before the capture of Ciudad Rodrigo it had been besieged in form for some time by Wellington, taking advantage of the weakened condition of the French army in consequence of a disastrous retreat from Portugal the year before, 1811.

Marmont had succeeded to the command while Badajoz was besieged, and before Ciudad Rodrigo fell. Collecting

[1] See map facing page 248.

his army in the field, his mobile force, corresponding to the navy in sea warfare, he marched towards Badajoz. Wellington, unable to sustain both siege and battle, raised the siege, retired into Portugal, and thence moved north of the Tagus to Almeida, there and thus confronting Ciudad Rodrigo, and watching. Marmont also returned to the north, to Salamanca, and had he remained expectant, on a concentrated defensive, ready to act offensively if need be, the presence of his force would have fixed that of Wellington; but he conceived the idea of sending help to a brother marshal, Suchet, then besieging Valencia in the east. As he moved south towards the Tagus, the British thought at first that he intended to invade southern Portugal from Badajoz; but as soon as he detached his five thousand men to the eastward Wellington recognized that south Portugal was not threatened. He saw also that north Spain had been stripped momentarily of effective French force, for Marmont had sent with the detachment a large part of his artillery and cavalry. Then the British swooped down upon Ciudad Rodrigo, carried and garrisoned it before the field army — the navy — could come to its support. The chance was close, and therefore the place was stormed before the time was ripe by the rules of the engineer's art. "Ciudad Rodrigo *must* be stormed to-night," read Wellington's orders; and his army understood the appeal to its courage to indicate the near return of the French relieving force.

It is to the general situation hence resulting that Napoleon's letter of instructions applies. He writes to Marmont,

"Your army being now strong, equipped again with siege artillery, and restored in *morale* as well as numbers, it is no longer necessary, in order to protect Badajoz, that you march upon it. Keep your army in divisions around Salamanca, spread out sufficiently for ready subsistence, but at such distances that all can unite in two marches;" that is,

in two days. "Make all your dispositions such that it may be understood you are preparing to take the offensive, and keep up a continual demonstration by outpost engagements. In such an attitude you are master of all the British movements. If Wellington undertakes to march upon Badajoz, let him go; concentrate your troops at once, march straight upon Almeida, and you may be sure he will quickly return to encounter you. But he understands his business too well to commit such a fault."

You have here the French army in the field, the mobile force corresponding to a navy, protecting its acquired post, Badajoz, by detaining the enemy's field army; that is, by drawing it away, or keeping it drawn away, from the position which it had shown its wish to capture. In the first instance, Badajoz had been saved by Marmont's approach, *driving* away Wellington. In the second, Ciudad Rodrigo was lost by misdirection and dissemination of Marmont's force; the British army in the field snatched away an important position. In the third, Badajoz is protected, not by direct action, but by the indirect effect of a sustained diversion menacing interests which the British could not afford to neglect.

The same method of diversion was projected on a gigantic scale by the Emperor Napoleon in 1804 and 1805, when he wished to draw away a large proportion of the British fleet from Europe, and in their absence to concentrate his own navy in the English Channel, to cover the descent upon Great Britain. It will be remembered that France during this period was on the defensive as regards its coast-line. By his formulated plan the fleets from Toulon, Rochefort, and Brest were all to escape from their ports, to meet in the West Indies, and to return in a body to the Channel. It was expected that the British would pursue, be baffled by their uncertainty as to the destination of the French, and that the latter would reach Europe again far enough in

advance to control the Channel for some days. The plan failed through various causes. The British commander-in-chief before Toulon, Nelson, did follow the Toulon fleet to the West Indies; but, though starting a month later than it, the better quality of the British fleet enabled him to get back first, contrary to the Emperor's calculations. Nor could Napoleon reckon upon the singular insight with which Nelson at Antigua divined that Villeneuve had returned to Europe; so that, having left the Straits of Gibraltar thirty-one days after the allies, he sailed upon his return thither only four days later than they, and got back a week before they entered Ferrol.

I may add that, besides the principal diversion by his fleets assembling in the West Indies, Napoleon's correspondence at that time is full of schemes for enticing the British squadrons away from the Bay of Biscay and the Channel.

It will be observed that the French fleet, going in this instance to the West Indies, was intended to produce and did produce just that effect, which its going to Corfu would have produced upon conditions in the Mediterranean, in the case discussed in the last lecture. The British fleet was drawn in pursuit to the West Indies; that is, far from the Straits of Dover, the strategic center of Napoleon's plans, the critical point of the campaign, as Corfu was remote from Alexandria and from the line of communications between that port and France. If Nelson had been an average commander he would have remained in the West Indies until he had tangible evidence that the French fleet had left them. This is no surmise. Many strongly urged him so to remain; the weight of opinion was against him; but he possessed that indefinable sagacity which reaches just conclusions through a balancing of reasoning without demonstrable proof. If he had remained until he got reliable information, the result would have been twenty allies

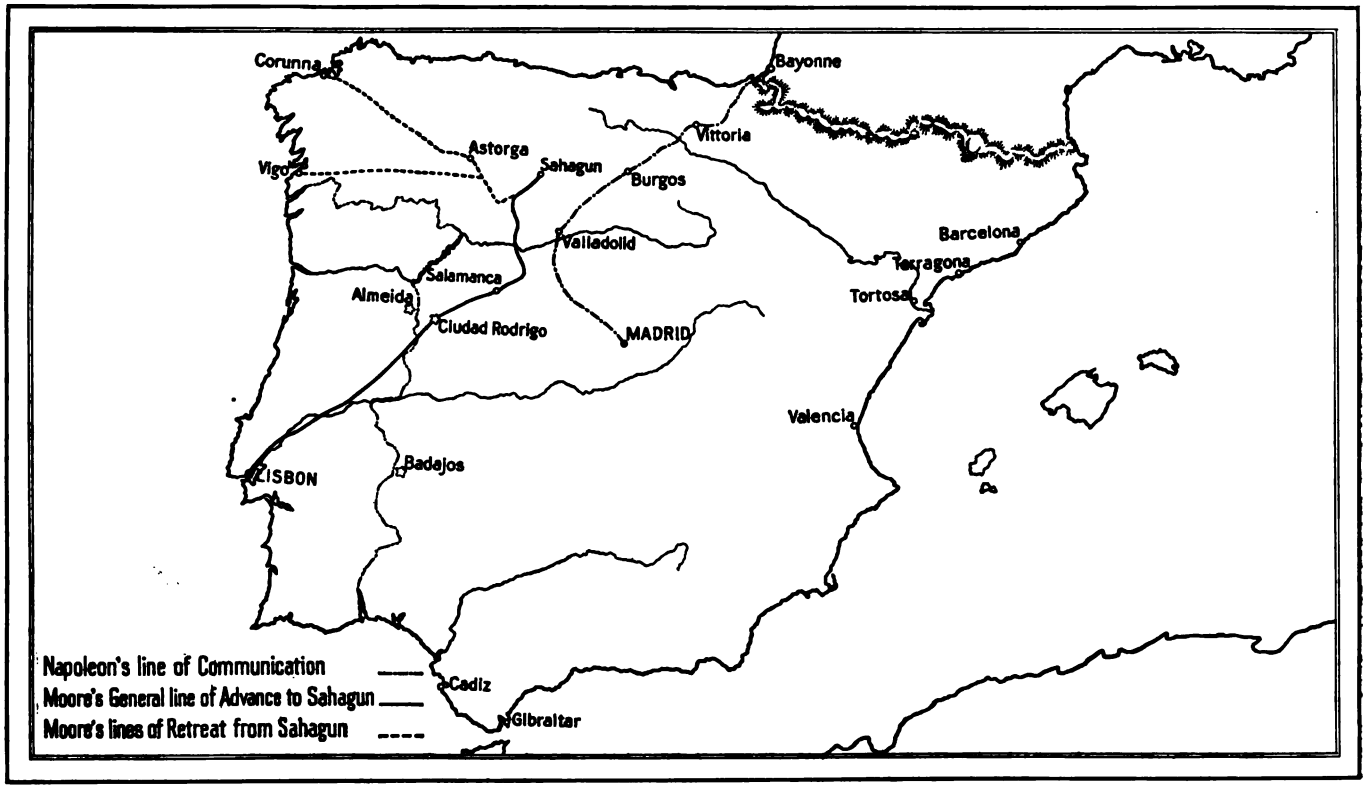
in Europe to support Napoleon's concentration, and the British concentration weakened by Nelson's dozen, — a total difference of thirty ships-of-the-line.

I will here draw your attention to the fact that Napoleon's plan in this case was very similar to, and apparently derived from, one elaborated in 1762 by the French prime minister of that period.[1] Napoleon probably knew of this from the French archives; but it is unlikely that Nelson did.

Whichever of the above-mentioned two courses the navy has to adopt, — driving away or drawing away, — it must again be noted that it is on the defensive as to the general operations, but on the offensive as to its own actions. This, it may be further noted, is exactly what Napoleon prescribed to Marmont. "The turn which the general affairs of Europe have taken," he writes, "compels the Emperor to renounce for this year the expedition against Portugal," that is, an offensive campaign. Therefore he prescribes a general defensive attitude, but one carrying offensive menace; in order thereby to protect Badajoz, and to secure the line of communications from France to Madrid, which Salamanca covered, but which Sir John Moore three years before had threatened with such disastrous effect to Napoleon's own plans, drawing him away from his strategic center, the critical point of the campaign, at a moment vital to his success.

Now, such conditions of things, as regards a conquest actual or supposed, precisely illustrates also the relation of the navy to home defense. In both cases the nation, being in actual possession, is in so far on the defensive; but if, from necessity or by a mistaken policy, it keeps its navy also on the defensive within its ports or tied to them, it abandons to the enemy its commerce and its communications with abroad. This was what the United States perforce did in 1812, having no navy to send abroad, except as commerce

[1] Corbett, "Seven Years' War," vol. ii, pp. 302–307.


Corunna
Bayonne
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Astorga
Sahagun
Vigo
Burgos
Barcelona
Valladolid
Tarragona
Salamanca
Tortosa
Almeida
Ciudad Rodrigo
MADRID
Valencia
Badajos
LISBON
Napoleon's line of Communication
Moore's General line of Advance to Sahagun
Moore's lines of Retreat from Sahagun
Cadiz
Gibraltar

destroyers. Such an abandonment will not necessarily lead to ruin, especially if the country be large, so as to be able to depend on internal resources, or have on its land frontiers neutral nations through whom a roundabout trade may be carried on. Neither will it altogether lose commerce in neutral bottoms, if its coast be too long for effective blockade; but it will suffer both humiliation and material loss, which a great nation should not risk. The true complement of any scheme of home coast defense is a navy strong enough either to drive the hostile fleet away from one's own shores or to keep it away by adequate threats to hostile interests. So used, a navy is unquestionably the best of coast defenses.

In this connection, because here entirely pertinent, I wish to introduce a comment which I shall develop at length in a later lecture; namely, that seacoast fortresses should not be thought, as they usually are, to be primarily defensive in function. Seacoast works, the office of which is limited to keeping hostile ships at a distance, but which are open on the land side, may be defensive merely; but a properly fortified port, capable of giving security to a navy, is defensive only as is a fortress, like Metz or Mayence, which contains an army able to take the field, and thereby compels the enemy to maintain before the place a detachment sufficiently strong to arrest any offensive action possible to the garrison.

Even our feeble War of 1812 yielded an illustration of this offensive character of a port capable of sheltering a squadron. The squadron of Commodore John Rodgers, in New York, was a garrison capable of acting offensively; and it did so. The British knew it had sailed in a compact body, but with what intentions they did not know. Consequently, their squadron on the American coast being small, they had to keep their ships together, lest one alone should encounter that squadron. This enforced concen-

tration, coupled with the necessity for the British to protect their own trade, left the American ports so loosely watched that the greater part of the returning American merchant vessels arrived safely. This defensive result was intended, and was obtained, by Rodgers' offensive cruise, the credit of which, in conception and in execution, belongs almost wholly to him. The sustained exertion of such offensive action depends upon ports capable of protecting the fleet. Otherwise it is destroyed, as at Port Arthur; or driven out, as at Santiago.

In this direction also we may seek a proper comprehension of what the size of a navy should be. It should be so great, and its facilities for mobilization and for maintenance of supplies should be such, that a foreign country contemplating war should feel instant anxiety because of the immediate danger that would arise from that navy, either to itself, or to its dependencies, or to its commerce. Such effect would be deterrent of war; and to deter is simply to practice diversion in another form. This has been announced, with military brevity and emphasis, as the official purpose of the German government in its naval programme adopted in 1900. "Germany must have a fleet of such strength that, even for the mightiest naval Power, a war with Germany would involve such risks as to jeopardize its own supremacy." Unhappily this purpose, when effected as towards Great Britain, will leave the United States far in the rear of Germany as a naval power.

It has been assumed, as a principle of strategy in reference to any theater of war, that the controlling point or system of points — the key of the situation, to repeat the familiar phrase — should be the objective of any offensive movement. It has also been stated in terms that the advance, or front of operations, should be pushed forward as far as can be done consistently with that closely linked communication, between all the parts, which binds the

system into a whole. The reason is, that all within such a system, or in rear of such a front of operations, being in your control, is more useful to you than to the enemy; more dangerous to him than to you. This increases your resources for the time being; and if peace finds you in such possession, you have a vantage ground in that subsequent bargaining which is usually and euphemistically styled "negotiations for peace."

The supreme instance of such an advanced front of operations afforded by maritime warfare was the British blockade of the French and Spanish ports during the wars of the French Revolution and Empire, 1793–1815. The British fleets before the several ports, — Brest, Rochefort, Ferrol, Cadiz, Toulon, — linked together by intermediate divisions composed chiefly of cruisers, watching the smaller outlets and scouring the adjacent sea, formed really a continuous line or front of operations. The efficacy of such control was evidenced by the security of the British Islands and colonies, and of British trade upon the sea. The whole ocean, the region in rear of this front of operations, was secured against all but raiding. This was evidenced by the smallness of the loss by British commerce, less than three per cent of the total embarked; and by the failure of all the enemy's projects of invasion.

This advanced front held by fleets at sea corresponds to a front held by armies in the field, when maintained by virtue of their own superiority. It is evident, however, that such advantages will be increased by the holding of nearby fortified places. For example, when Bonaparte in 1796, in his advance against Austria, found himself held up by the fortress of Mantua, flanking his necessary line of advance, he took as his front of operations the line of the Adige, with the fortress of Verona bestriding the river. Verona was capable of withstanding a siege; it could be defended by relatively few men; it secured stores therein

accumulated; it had also the moral prestige of strength, and it assured the passage of the stream when necessary to throw troops from one side to the other. All this was additional to the force of the French army itself. Thus at the battle of Arcola Bonaparte ventured to leave Verona with a very small garrison, while with the mass of his army, by night, he crossed the Adige lower down and struck at the rear of the Austrian army advancing on Verona. There was in this much risk and much bluff; but he was successful, which he could only have been by the use of the fortress. This served his army in the same manner that a fortified seaport serves a navy which dares strike outside in offensive-defensive action. By occupying this position, and by the additional strength conferred by the river and by Verona, prolonged to the north by Lake Garda, close along which the upper Adige flows, Bonaparte controlled all the resources of the valley of the Po and of south Italy, which lay behind; just as Great Britain did those of the ocean, by her fleets taking up the line of the French coast.

This maritime line likewise was strengthened by strong places; namely, by the home ports, Portsmouth and Plymouth, and abroad by Gibraltar, Malta, Port Mahon, and others. These were less open to attack than Verona was; and they afforded the local support of stores, of repairing, of refitting. Also, in case of sudden irruption by an escaping enemy's division they supplied refuge. Single ships or inferior divisions could find security within them. In addition to this defensive usefulness, such positions have also offensive power because of their nearness to, and thereby flanking, great lines of communication. Thus Gibraltar and Malta flanked all lines through the Mediterranean, Plymouth and Portsmouth through the Channel, Jamaica through the Caribbean. Similarly Brest, Cadiz, and so on flanked British lines to the southward; and

therefore, as well as for other reasons, had to be contained, as Bonaparte had to contain Mantua.

Turning now to the Caribbean Sea in its entirety, as a region in which the United States might have occasion to desire influence and to exert it, and supposing all the islands at the outset to be in an enemy's possession, if Cuba should pass into our hands we should control a very important and useful position; but we might still be far from controlling thereby the whole sea. Assuming the opposing naval forces at the beginning to approach equality, it probably would not yet be in our power to control the whole. In that case the front of operations should be pushed as far forward as possible. For instance, it might be desirable to occupy Samana Bay and to control the Mona Passage; or, if strong enough, we might wish to push our front, the line maintained by the battle-fleet, to the southward and eastward, to harass the enemy and to protect the steamer routes through the Windward Passage to the Isthmus, which routes, by this advance of our own front, would lie in rear of our fleet.

Cuba, being now by the supposition ours, would cover our rear towards the Gulf of Mexico, wherein is an important part of the home base of operations. The base of the enemy may be, let us suppose, in the Lesser Antilles, and the sea between, under the supposition of equal navies, would be in dispute or in uncertain possession. The position of the enemy's fleet and its bases would indicate the direction of the next line of operations.

The enemy, being deprived of Cuba, whether by fortune of war or by original non-possession, might still hold Jamaica, as well as certain ports of the Windward Islands. This is the actual case of Great Britain, which holds Santa Lucia and Jamaica. In such case the main interest of the war would concentrate for the time around Cuba and Jamaica, which would become the critical point of the cam-

paign. The series of posts, Great Britain, Santa Lucia, Jamaica, the Isthmus of Panama, would reproduce almost exactly the other existing line, — Great Britain, Gibraltar, Malta, the Isthmus of Suez. If the fleet at Jamaica should be inferior to that at Cuba, the Cuban fleet by taking position before Jamaica would intercept communications with the Windward Islands and reinforcements from them, would cover its own communications with Cuba and the United States, as well as the steamer routes, and by all this action would press the fleet within to battle, to relieve itself of these disadvantages. In this case as in the other the position of the enemy's fleet and his naval base indicate the direction of operations; as Port Arthur determined the direction of the Japanese naval war, as well as much of the Japanese effort on land, and Santiago that of the American fleet and army in 1898. The consequent movements of the Japanese and the Americans were a direct compulsion upon the Russians in the one instance and the Spaniards in the other to fight, which each avoided only by accepting fleet suicide.

Operations therefore should not cease with the occupation of the key. They should be pushed on untiringly; but the same reasoning which, to assure the hold on the key, prescribed the pursuit and destruction of the enemy's fleet holds good for the further operations. It is perhaps even more true of the sea than of the land that the proper objective is not a geographical point, but the organized military force of the enemy. Positions like Egypt and the defile of the Danube are important, not only nor mainly as inert masses of matter favorably placed, but because from them masses of trained warriors or of armed ships can act with such facility in different directions that they are worth more than greater numbers less well situated. The same is true of any place artificially fortified; its chief value is the facilitating the movements of the mobile forces.

Therefore, with the possession of the advantages which the occupation of such positions confers comes the obligation to use them. How? The answer to this question is given in no doubtful manner by military writers. The organized force of the enemy, that is, his active army in the field, was the favorite objective of Napoleon, says Jomini.

Let it be supposed that you have seized such a strategic position and driven the enemy's fleet, after more or less fighting, off the theater of war in your rear and immediate front. This means that your home communications are secure, except from raiding, and that you have established your naval superiority for the time being. If the enemy's ships in an organized body, not as scattered cruisers, remain within the limits of the given theater in front of your present position, it will be because they still have points of support and supply, upon which they can depend for subsistence and to the defense of which they are necessary. It is not supposable that otherwise they can keep the sea within a restricted region; for the operations of coaling and taking on board stores, although probably feasible at sea if unmolested, could not go on with a superior fleet in the neighborhood, kept informed of their movements by watchful lookout ships and wireless telegraphy. Such points of supply or bases, therefore, there must be, and they indicate the direction of your next line of operations.

The usual great predominance of the British navy during the maritime historical period most vivid in our recollections has prevented naval strategy from yielding as many illustrations in point as otherwise might have been the case. The control which this predominance perpetuated over the communications between the enemy's bases and any objective proposed by him dried up at the source all other exhibitions of strategy, because communications, in the full meaning of the term, dominate war. As an element of strategy they devour all other elements. This usual

predominance of a single Power gave origin to a French phrase of somewhat doubtful accuracy: *La Mer ne comporte qu'une seule maîtresse.* "The Sea brooks only one mistress." This is superficially plausible; but if understood to mean that the control of the sea is never in dispute, the mastery never seriously contested, it is very misleading. The control of the sea, even in general, and still more in particular restricted districts, has at times and for long periods remained in doubt; the balance inclining now to this side, now to that. Contending navies have ranged its waters in mutual defiance. This was conspicuously the case in the War of American Independence; to some extent also in the Seven Years' War, 1756–1763.

For instance, the attack upon Quebec and consequent reduction of all Canada in 1759 demanded as a first step the capture in 1758 of a fortress, — Louisburg, in Cape Breton. By this, the French fleet, which previously had gone back and forth, between France and Canada, in mass or in big detachments, was deprived of a necessary base of operations affecting the communications of the St. Lawrence River.

During the period of the French Revolution and of Napoleon, Great Britain was for most of the time sole mistress of the seas; yet in 1796 she was compelled to evacuate the Mediterranean. That limited area of the seas — the Mediterranean — was the scene of a protracted naval campaign with varying balance from 1793 to 1798, when it was decided finally in favor of Great Britain by the Battle of the Nile.[1] It is worth while to trace the leading incidents, for they illustrate the occurrence and the necessity of just such steps as we have been considering; thus proving that the consideration is not academic merely, but springs from the nature of things.

In 1793, the British fleet entered the Mediterranean,

[1] See map facing page 260.

with the Spaniards as allies. Owing to the disloyalty of southern France to the Revolutionary government, an opportunity arose of obtaining possession of Toulon and its fleet; and this determined the first objective and line of operations of the allies. You will recall the importance attached to the capture of Toulon by the great Duke of Marlborough nearly ninety years before, and the strenuous though abortive attempt of Prince Eugène in 1707 to accomplish this result.[1] The occupation of Toulon would paralyze at its source all French naval movement in the Mediterranean, and upon naval movement depended in great measure the land campaigns in northern Italy and along the Riviera. In 1793, Toulon was delivered by treachery; the allied fleets entered the port and allied troops occupied the lines surrounding it. The British admiral wished at once to seize or destroy the French squadron within, thus striking at the enemy's organized force; but this was opposed by his Spanish colleague, an officer of former wars, profoundly conscious and jealous of British naval superiority, which this destruction would increase. The British officer dared not chance the result of a rupture of the alliance; and this political consideration saved the French ships, most of which afterwards took part in the Battle of the Nile. Without them Bonaparte's Egyptian expedition could not have been started.

The French Government soon besieged Toulon, and the clear sight of Bonaparte into a tactical situation led to the seizure of a position from which batteries commanded the fleets at anchor. Toulon was evacuated perforce. The Spaniards retired to their ports; and the British, by the loss of the place itself, were compelled now to take the step which usually comes first. They had to obtain an advanced position, for refit and repair, for accumulation of stores, — in a word, a local base, — from which to control Toulon

[1] Ante, page 97.

and support Austrian operations on the Riviera. This they had been able to neglect hitherto only through the chance which had placed Toulon itself in their hands. For a brief moment they took position in Hyères Bay, close to Toulon; but this was too near the mainland, too open to a repetition of the occurrences which had driven them from Toulon. Consequently they moved their advanced base to San Fiorenzo Bay, a harbor in the north of Corsica. This, with other ports of the island, they were enabled to occupy through the momentary disaffection of the inhabitants to France.

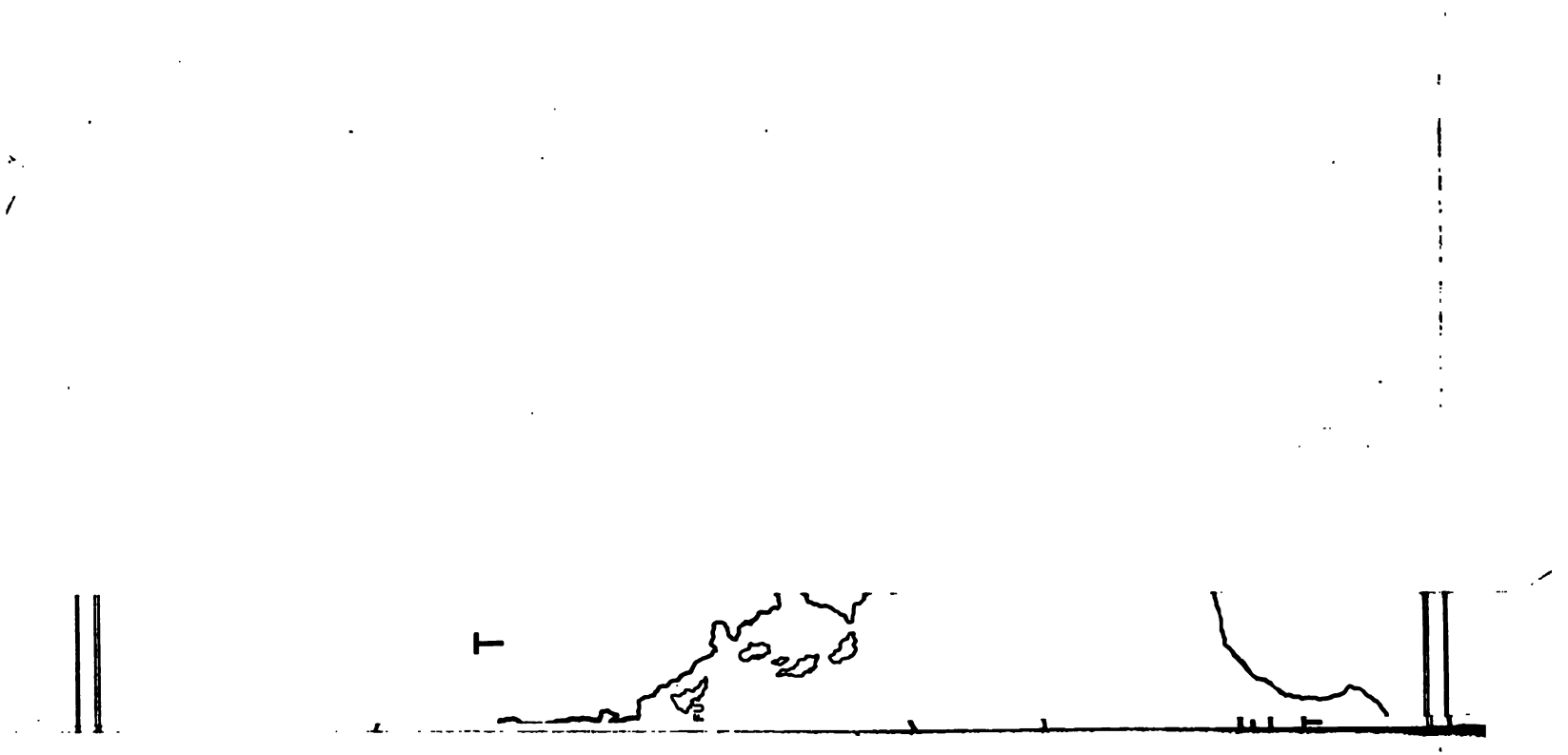
This advanced position they held, and garrisoned to an extent which was sufficient so long as the islanders sided with them. The waters between Corsica and Toulon and Genoa became a debatable ground, in which the British upon the whole predominated, but which could not be said to be in their undisputed control. The neighboring sea had perhaps only one mistress, but that mistress was not without a rival. The case is that of our supposed fleets, resting, one upon Cuba, the other on Santa Lucia or Martinique. Two fleet actions were fought with the Toulon ships in 1795; neither decisive. From San Fiorenzo as a base, operations were maintained along the Riviera, the ultimate objective of operations, in support of the Austrian advance against France; but here also nothing conclusive was effected. From 1794 to and including the first half of 1796 there was a perpetual conflict; resting on one side upon Toulon, on the other upon Gibraltar and upon the advanced base which the British had seized at San Fiorenzo. Concerning this period, Nelson some years after affirmed that, if the British admiral had been efficient, the French could not have maintained the forward position which they did. This, if accurate, means that when Bonaparte in April, 1796, took command of the army of Italy, he would have found the Austrians so far advanced, and

the British navy in such control of the shore line from Nice to Genoa, that his plan of campaign must have been different. His very first movement, by which he struck in between and separated once for all the Austrians from their Piedmontese allies, was possible, only because the British and Austrian neglect of opportunities allowed him at the beginning to be at Savona, far in advance of Nice. Also, but for this, his communications, as well for troops — reinforcements — as for supplies and for ammunition, would have depended upon a very difficult land transport, with wretched roads, instead of the facile water route, following a coast-line bristling with French batteries.

You observe here the ultimate objective, northern Italy and the Riviera, the occupation of which by the allies of Great Britain would menace Toulon; you recognize also the intermediate objective, San Fiorenzo, essential for the maintenance of the British naval operations. Those operations thus constituted Nelson declared would have been successful under competent leadership. Ample time, two years, was afforded. Then came Bonaparte. With the advantages left in his hands, and by his own masterly management, in two months he had routed the Austrians and was on the Adige and in Verona. West and south of this position all opposition to him fell to pieces. The whole shore line of north Italy became French; and through its ports numerous French partisans passed in small boats to Corsica, stiffening there the disaffection to the British, which had begun already. At the same moment Spain, swayed largely by Bonaparte's victories, passed into alliance with France. A junction followed of the fleets of the two countries. Their organized naval forces, of which the detachment spared at Toulon was an important element, were combined. In face of this odds the British felt compelled to abandon their advanced position, and withdrew their fleet to Gibraltar, whence it further fell back upon Lisbon.

This movement of the organized force of the British navy was not molested by the allied fleets, which also separated soon after; the Spaniards going to Cartagena, the French to Toulon. The Spaniards then attempted to take their ships to Cadiz. The British admiral put to sea and met them off Cape St. Vincent. Though very inferior in numbers, he knew the superiority of his ships in quality. "A victory is very necessary for England," he was heard to say; and, the Spaniards offering him a tactical "opportunity," he fought and beat them. They retired into Cadiz, where the British shut them up by a blockade, the force of which was largely increased from home, in order to permit a detachment from it against the expedition rumored to be fitting out in Toulon. This detachment was entrusted to Nelson, who found the thirteen ships of the French off the coast of Egypt, where he annihilated them at the Battle of the Nile, in 1798. The organized Mediterranean naval force of France and Spain, having failed to utilize its opportunity when mistress of the northern Mediterranean, and having separated into two bodies, was thus beaten in detail, and the whole Mediterranean passed into British control for the rest of the war. Bonaparte having already compelled Austria to peace, in 1797, there were no longer any Austrian operations that the British fleet could assist; but its own front, dictated by the necessities of the time, ran from Gibraltar to Minorca, which had been seized by the commander-in-chief at Gibraltar when he received the news of the Nile, thence to Sicily and Naples, and was continued on by way of Malta, still held by the French, to Alexandria and the Levant, where Bonaparte then was.

From this brief outline it is evident that the sea in the past has not been so exclusively dominated, even by Great Britain, at her greatest, that a contest for control may not take the form of a succession of campaigns marked by



ups and downs. In fact, the very year after the Battle of the Nile a French fleet of twenty-five of the line broke into the Mediterranean, turned all the British dispositions upside down, and finally went back with fifteen or twenty Spaniards, bringing to Brest a concentrated body of over forty ships. Had there been any single port in the Mediterranean capable of maintaining such a body, they might have remained there; modifying conditions, if not reversing them. As it was, even in Brest they starved for want of supplies; but while this result shows the need of properly equipped bases, it also demonstrates that Great Britain did not control the sea in such sense that her hold could not be shaken. Yet in no war has she been more powerful at sea. In the War of American Independence, the West Indies and North America witnessed a like contest for control; of which Suffren's campaign in the East Indies, at the same period, is also a conspicuous illustration.

The necessity for properly equipped and properly situated local bases for a naval force in distant or advanced operations is also evident from this Mediterranean example. The War of American Independence offers a strikingly similar instance, on a smaller scale. In 1782 and 1783, the French and British squadrons in the East Indies were substantially equal. The scene of operations, dictated by local conditions on shore, was the Coromandel Coast; the east side of Hindustan. Naval coöperation was not practicable during the strength of the northeast monsoon, say from November to March, because the onshore wind blew with violence. The British retired for that season to Bombay, where they had establishments for refit. The French had no similar port nearer than the Mauritius, and all their previous campaigns had failed for want of an advanced base on, or near, the Coromandel Coast. It happened, on this occasion, that the Dutch, who then owned Ceylon, had entered the war

against Great Britain in 1781, and the British had taken from them Trincomalee on the northeast coast of Ceylon; that is, in prolongation, southward, of the Coromandel Coast. There had not, however, been time enough to fortify the port properly, or else, as is more likely, the opportunity to do so had been neglected; and the French Admiral Suffren by dexterity and rapidity of action gained possession. This was the advanced position he needed, and when winter came he retired there to refit, thus remaining close to the scene of war, a very important matter for its political effect upon the French allies on shore. The British fleet went to Bombay, practically out of reach for four months or more. Had it retained Trincomalee, the French must have gone to Mauritius, or remained at anchor off a dangerous lee shore, with which they could seldom communicate. The result was that Suffren next season appeared on the scene two months before the British, and obtained successes which might have been decisive if peace had not intervened.

From the instances cited, it may be accepted that war upon the sea may take the shape of a protracted series of campaigns, between forces so nearly equal as to afford large play for strategic combinations. In fact, during the War of American Independence, of which Suffren's campaign was an episode, the seas of North America and the West Indies offered a similar illustration of the balance of naval forces; the scales swaying now to this side, now to that, up to the decisive events of Yorktown in 1781, and Rodney's victory of 1782, which marked the end of the struggle in either quarter. The same general result may be found, though to a less marked degree, even when one fleet is markedly superior to the other. It is clear also that the vigor and celerity which are essential to ultimate success may depend upon the tenure of local bases of operations. This was one great advantage of Japan over Russia in the recent

war. It may be, however, that the local bases of the enemy are too strongly fortified for attack, or that the assailant's force is too weak for quick reduction — as happened at Port Arthur.

As a matter of experience, local bases, if fairly fortified, are rarely attacked until the one party or the other has established predominance on the water. In 1760–1762, the British captured Martinique and Guadeloupe from the French, and again in 1794 and 1810; but in the intermediate war, of American Independence, they made no attempt upon either. This was partly because their army was occupied on the American continent; partly because they could not risk a big detachment of troops when a naval check, as at Grenada, in 1779, might cause its surrender. They did snatch away Santa Lucia; but that was at the very opening of hostilities, in 1778, and was due to their own local base at Barbados being reinforced before the French had completed their preparations for defense. It was a successful *coup de main*. In the same way, the French and Spaniards did not attempt Jamaica until 1782, when they were in superior force in the Caribbean. The attempt failed with Rodney's victory over the French fleet; that is, the allies were beaten in detail. The defeat of one part of their force rendered the other, the Spaniards, innocuous.

The distance from your own most advanced position to the position you wish to attack may be a further element of difficulty. To act from Cuba against the Windward Islands, such as Martinique and Santa Lucia, which by position control the eastern gateways of the Caribbean Sea, is clearly a more complicated undertaking than similar action from Cuba against Jamaica. If a harbor of Porto Rico is susceptible of adequate defense against attack in force, it would be in respect of situation a more advantageous base of operations against the Windward Islands than anything in Cuba. St. Thomas, I believe, is capable

of such defense; and it is better situated than Porto Rico.

To a fleet already weakened numerically by its first advance and by the necessity of guarding its first line of communications, such as that from the United States ports to Cuba, a second long line, as from Cuba to the Windward Islands, or to the Isthmus, is a serious consideration if the enemy be active. The care of the second advanced line may bring the fleet down to an equality of strength with the enemy who has an advantage in acting nearer his own base. In such a case the inability of the fleet to carry supplies, beyond a certain amount, in its own bottoms, should be supplemented by a depot — if any such offer — some distance in front of the position to which the first advance has been carried. Samana Bay or Porto Rico will illustrate such intermediate — that is, advanced — depots; corresponding to San Fiorenzo Bay as before cited, or to Port Royal and Key West in the War of Secession, or to Guantanamo in the American operations against Santiago. Such a depot need only be safe from a raid, for it may be assumed that the movements of the enemy can be watched sufficiently to prevent a sudden attack in force upon it; the fleet being, by the supposed advance, in face of the enemy's fleet and base. If more than one such advanced, or intermediate, point be available, a careful choice must be made between them; looking not only to their intrinsic advantages, but to their relations to the probable movements of the fleet, and to the first and second lines of communication, the protection of which will draw upon those forces of the fleet that ought to be dispersed as little as possible.

Having reference to the defense of the Canal, which is the crucial strategic feature of the whole Caribbean, it may be remarked that to attack an enemy's base, such as Martinique or Santa Lucia, is a more effective measure for protection and control of the Isthmus than a direct defense

of the Isthmus itself would be; whether such defense be passive only, by fortification, or active, by a fleet resting upon the fortified Canal. For, if one of the islands — supposed an enemy's base — is attacked by a combined expedition, such attack, so long as sustained in adequate force, detains the scene of war at a distance from the Canal, and protects all communications west of the operation. It constitutes an advanced front of operations, combined with the moral power of the initiative and of the offensive. If it ultimately fails, it nevertheless will have produced this result for the time it lasts; while if successful, the enemy is deprived of a necessary base, the recovery of which involves operations that will exert the same protective influence as those which effected the capture.

If between the position you have first occupied and the enemy's base there is only clear sea (as between Cuba and Martinique, if not able to use Samana), it may be possible to take with the fleet a number of transports, above all, of colliers; especially if you are so superior as to allow a certain proportion of the fleet to be continually coaling, without reducing the number engaged below the enemy's strength. Before Trafalgar, Nelson thus sent his ships by groups of a half-dozen to water at Tetuan. Owing to the absence of such a division he had but twenty-seven instead of thirty-three on the day of battle. If he could have watered at sea, thus keeping his vessels together, the battle would have been even more decisive. The battleship Massachusetts lost her share in the battle of Santiago, because coaling at Guantanamo.

It will be borne in mind that a body of transports is always a tactical weakness in the day of battle, and will probably lower the fleet-speed of a number of high-powered ships of war. The question of speed in such an advance, however, may be of secondary importance, if the enemy's expected reinforcements cannot reach him within a known time; and,

when about to engage, the safety of colliers and other incumbrances should be dismissed from mind, in view of the greater tactical necessity of beating the enemy while he is still inferior. In these calculations, much depends upon the respective strength of the two fleets. The best defense for the transports will be to attack the enemy and occupy him fully, just as the best defense of the Isthmus would be to attack an enemy's base. This has been, historically, the usual practice. In the expedition against Jamaica in 1782, De Grasse, when he found Rodney on his heels, sent his transports into the neighboring ports of Guadeloupe, and then fought.

The case of further advance from your new base may not be complicated by the consideration of great distance. The next step requisite to be taken may be short, as from Cuba to Jamaica; or it may be that the enemy's fleet is still at sea, in which case it is the great objective, now as always. Its being at sea may be because retreating, from the position you have occupied, towards his remoter base; either because conscious of inferiority, or, perhaps, after a defeat more or less decisive. It will then be necessary to act with rapidity, in order to cut off the enemy from his port of destination. If there is reason to believe that you can overtake and pass him with superior force, every effort to do so must be made. The direction of his retreat is known or must be ascertained, and it will be borne in mind that the base to which he is retreating and his fleet are separated parts of one force, the union of which must be prevented. In such a case, the excuses frequently made for a sluggish pursuit ashore, such as fatigue of troops, heavy roads, etc., do not apply. Crippled battleships must be dropped, or ordered to follow with the colliers. Such a pursuit presumes but one disadvantage to the chasing fleet, viz., that it is leaving its coal base while the chase is approaching his; and this, if the calculations are close, may

give the pursuing admiral great anxiety. Such anxieties are the test and penalty of greatness. In such cases, excuses for failure attributed to shortness of coal will be closely scrutinized; and justly. In all other respects, superiority must be assumed, because on no other condition could such headlong pursuit be made. It aims at a great success, and successes will usually be in proportion to superiority, either original or acquired. "What the country needs," said Nelson, "is the annihilation of the enemy. Only numbers can annihilate."

If such a chase follow a battle, it can scarcely fail that the weaker party — the retreating party — is also distressed by crippled ships, which he may be forced to abandon — or fight. Strenuous, unrelaxing pursuit is therefore as imperative after a battle as is courage during it. Great political results often flow from correct military action; a fact which no military commander is at liberty to ignore. He may very well not know of those results; it is enough to know that they may happen, and nothing can excuse his losing a point which by exertion he might have scored. Napoleon, says Jomini, never forgave the general who in 1796, by resting his troops a couple of hours, failed to get between an Austrian division and Mantua, in which it was seeking refuge, and by his neglect found it. The failure of Admiral de Tourville to pursue vigorously the defeated Dutch and English fleet, after the battle of Beachy Head, in 1690, caused that victory to be indecisive, and helped to fasten the crown of England on the head of a Dutch King, who was the soul of the alliance against France. Slackness in following up victory had thus a decisive influence upon the results of the whole war, both on the continent and the sea. I may add, it has proved injurious to the art of naval strategy, by the seeming confirmation it has given to the theory of the "fleet in being." It was not the beaten and crippled English and Dutch "fleet in being" that prevented

an invasion of England. It was the weakness or inertness of Tourville, or the unreadiness of the French transports.

Similarly, the refusal of Admiral Hotham to pursue vigorously a beaten French fleet in 1795, unquestionably not only made that year's campaign indecisive, but made possible Napoleon's Italian campaign of 1796, from which flowed his whole career and its effects upon history. The same dazzling career received its sudden mortal stab when, in the height of his crushing advance in Spain, with its capital in his hands, at the very moment when his vast plans seemed on the eve of accomplishment, a more enterprising British leader, Sir John Moore, moved his petty army to Sahagun, on the flank of Napoleon's communications between France and Madrid. The blow recoiled upon Moore, who was swept as by a whirlwind to Coruña, and into the sea; but Spain was saved. The Emperor could not retrieve the lost time and opportunity. He could not return to Madrid in person, but had to entrust to several subordinates the task which only his own supreme genius could successfully supervise. From the military standpoint, his downfall dates from that day. The whole career of Wellington, to Waterloo, lay in the womb of Moore's daring conception. But for that, wrote Napier, the Peninsular War would not have required a chronicler.

An admiral may not be able to foresee such remote consequences of his action, but he can safely adopt the principle expressed by Nelson, in the instance just cited, after hearing his commander-in-chief say they had done well enough: "If ten ships out of eleven were taken, I would never call it well enough, if we were able to get at the eleventh."

The relations between the fleets of Admirals Rozhestvensky and Togo prior to their meeting off Tsushima bore no slight resemblance to those between a pursued and a pursuing fleet. The Russian fleet, which had started before the

Port Arthur division succumbed, was placed by that event in the position of a fleet which has suffered defeat so severe that its first effort must be to escape into its own ports. This was so obvious that many felt a retreat upon the Baltic was the only course left open; but, failing that, Rozhestvensky argued that he should rush on to Vladivostok at once, before the Japanese should get again into the best condition to intercept him, by repairing their ships, cleaning the bottoms, and refreshing the ships' companies. Instead of so ordering, the Russian government decided to hold him at Nossi-Bé (the north end of Madagascar), pending a reinforcement to be sent under Admiral Nebogatoff. Something is to be said for both views, in the abstract; but considering that the reinforcement was heterogeneous and inferior in character, that the Russian first aim was not battle but escape to Vladivostok, and, especially, that the Japanese were particularly anxious to obtain the use of delay for the very purpose Rozhestvensky feared, it seems probable that he was right. In any event, he was delayed at Nossi-Bé from January 9 to March 16; and afterwards at Kamranh Bay in French Cochin China, from April 14 to May 9, when Nebogatoff joined. Allowing time for coaling and refitting, this indicates a delay of sixty to seventy days; the actual time underway from Nossi-Bé to Tsushima being only forty-five days. Thus, but for the wait for Nebogatoff, the Russian division would have reached Tsushima two months before it did, or about March 20.

Togo did not have to get ahead of a flying fleet, for by the fortune of position he was already ahead of it; but he did have to select the best position for intercepting it, as well as to decide upon his general course of action: whether, for instance, he should advance to meet it; whether he should attempt embarrassment by his superior force of torpedo vessels, so as to cripple or destroy some of

its units, thus reducing further a force already inferior; also the direction and activities of his available scouts. His action may be taken as expressing his opinions on these subjects. He did not advance; he did not attempt harassment prior to meeting; he concentrated his entire battle force on the line by which he expected the enemy must advance; and he was so far in ignorance of their movements that he received information only on the very morning of the battle. This was well enough; but it is scarcely unreasonable to say it might have been bettered. The Japanese, however, had behind them a large part of a successful naval campaign, the chief points of which it is relevant to our subject to note. They had first by a surprise attack inflicted a marked injury on the enemy's fleet, which obtained for them a time of delay and opportunity during its enforced inactivity. They had then reduced one of the enemy's two naval bases, and destroyed the division sheltered in it. By this they had begun to beat the enemy in detail, and had left the approaching reinforcement only one possible port of arrival.

If a flying fleet has been lost to sight and has but one port of refuge, pursuit, of course, will be directed upon that port; but if there are more, the chasing admiral will have to decide upon what point to direct his fleet, and will send out despatch vessels in different directions to find the enemy and transmit intelligence. Cruisers engaged in such duty should be notified of the intended or possible movements of the fleet, and when practicable should be sent in couples; for although wireless telegraphy has now superseded the necessity of sending one back with information, while the other remains in touch with the enemy, accidents may happen, and in so important a matter it seems expedient to double precautions. The case resembles duplicating important correspondence; for wireless cannot act before it has news, and to obtain news

objects must be seen. It is to be remembered, too, that wireless messages may be intercepted, to the serious disadvantage of the sender. It seems possible that conjunctures may arise when it will be safer to send a vessel with tidings rather than commit them to air waves.

Thus, in theory, and to make execution perfect, — to capture, so to say, Nelson's eleventh ship, — the aim must be to drive the enemy out of every foothold in the whole theater of war, and particularly to destroy or shut up his fleet. Having accomplished the great feature of the task by getting hold of the most decisive position, further effort must be directed towards, possibly not upon, those points which may serve him still for bases. In so doing, your fleet must not be divided, unless overwhelmingly strong, and must not extend its lines of communication beyond the power of protecting them, unless it be for a dash of limited duration.

If compelled to choose between fortified ports of the enemy and his fleet, the latter will be regarded as the true objective; but a blockade of the ports, or an attack upon them, may be the surest means of bringing the ships within reach. Thus, in the War of American Independence, the siege of Gibraltar compelled the British fleet on more than one occasion to come within fighting reach of the enemy's blockading fleet, in order to throw in supplies. That the allies did not attack, except on one occasion, does not invalidate the lesson. Corbett in his Seven Years' War points out very justly, in Byng's celebrated failure, which cost him his life, that if he had moved against the French transports, in a neighboring bay, the French admiral would have had to attack, and the result might have been more favorable to the British. Such movements are essentially blows at the communications of the enemy, and if aimed without unduly risking your own will be in thorough accord with the most assured principles of strategy. A

militarily effective blockade of a base essential to the enemy will force his fleet either to fight or to abandon the theater of war. Thus, as has been pointed out elsewhere, in Suffren's campaign in Indian Seas, so long as Trincomalee was in possession of the British, a threat at it was sure to bring them out to fight, although it was not their principal base. The abandonment of the theater of war by the navy will cause the arsenal to fall in time, through failure of resources, as Gibraltar must have fallen if the British fleet had not returned and supplied it at intervals. Such a result, however, is less complete than a victory over the enemy's navy, which would lead to the same end, and so be a double success, ships *and* port.

If the enemy have on the theater of war two or more ports of supplies, which together form his base, and those points fulfill the condition before laid down, that they should not be so near that both can be watched by one fleet, the task becomes more difficult. The two most important naval stations on our Atlantic coast, Norfolk and New York, offer such conditions, being some two hundred and fifty miles apart; and to a retreating United States fleet the second entrance to New York, by Long Island Sound, together with Narragansett Bay, constitutes for a pursuing enemy a further complication which favors escape. A single port with widely separated entrances approaches the condition of two ports, in the embarrassment imposed upon an enemy who has lost touch. Admiral Togo was confronted with just this perplexity. Vladivostok could be reached by three different routes, wide apart. A position heading off all three could be found close before Vladivostok itself; but, besides the possibility that an unfavorable chance, such as a fog, might allow the Russians to slip by, in which case they would not have far to go to get in, there was also the risk that, even if defeated, those which escaped for the moment could enter, thus making

a victory less decisive. The pursuit of the day following the battle picked up ships which had got by, and in the supposed case might have reached port.

In the instructions of Napoleon to Marmont, before cited, the Emperor, estimating the various chances from the dispositions he has ordered, considers that of battle near Salamanca. This is to be desired, he writes, because, if beaten so far from the sea, the English will be ruined, and Portugal thereby conquered. This distance from the sea was distance from the English refuge. It was the merit of Sir John Moore that in the headlong pursuit by the Emperor he avoided decisive action, and got his army to the sea; fugitive, and demoralized by exhaustion, but still saved. It is to be remembered that in this very recent instance of Tsushima the Japanese immediately before the battle had lost touch with the enemy. Over a century before Togo, Rodney failed more than once to intercept French bound to Martinique, because they used one of the many passages open between the Windward Islands to enter the Caribbean, and so escaped detection until too late to be intercepted. To cruise before Martinique was ineffective, because the French had other available refuges in Guadeloupe; and besides, with the perpetual trade wind, and calms intervening, blockading sailing ships fell to leeward, — could not keep their station.

The guiding principle in all these cases is that your force must not be divided, unless large enough to be nowhere inferior to the enemy, and that your aim should be to reduce his base to a single point, out of which he can then be driven by regular operations, or by exhaustion; or, at least, to reach which with supplies, or for refuge, his fleet must accept battle. Thus the British in 1794, and again in 1808–1810, took from the French both Martinique and Guadeloupe, depriving them of all foothold in the West Indies, and so securing the Caribbean for British commerce.

As regular operations usually require much more time than assault does, if there be more than one arsenal the weaker would preferably be carried by force, leaving the strongest to fall afterwards by the less dangerous means of regular operations already indicated for a single post. In the Mediterranean, from 1798 to 1800, the French held both Malta and Egypt. The strength of the fortifications of Malta is known; whereas Egypt had nothing comparable. Egypt after long blockade was reduced by an extensive combined assault, a great fleet and a considerable army. Malta was overcome by cutting its communications, and surrendered to exhaustion. Port Arthur was taken by force. If Rozhestvensky had reached Vladivostok without a battle, the war would have continued; but the Japanese under the conditions would probably have contented themselves with blockading that port, relying upon the presence of their fleet assuring all the sea behind, which would secure the communications of the army in Manchuria.

Going on thus from the simpler to the more difficult cases, we now reach the one where your strength is not great enough to give present hope of driving the enemy quite out of the field of war. That is, an attitude generally defensive in character succeeds one that is distinctively offensive. When this occurs, you will seek to occupy as advanced a position as possible, consistently with your communications. Such advanced position may not be a point or a line of the land, but at sea. If Cuba, for instance, belonged to the United States, it may be conceived that the fleet would seek to control the Mona Passage, resting on no nearer base than the eastern ports of Cuba. Or from the same base, the fleet might seek to maintain a cruising ground to the southward in the Caribbean Sea, to harass the enemy's commerce or protect the interests of its own nation. It might, again, in its advanced position, be simply waiting for an expected attack, — an attempt, pos-

sibly, of the enemy to regain the position which had been seized, — when its duties would be to delay, harass and finally attack him, as before suggested in speaking of his action upon your advance.

The object of such an advanced position as is now being discussed is to cover the ground or sea in its rear, and to meet and hinder the advance of the enemy. Consequently, it should be chosen in all its details with strict reference to strategic considerations; until circumstances change, a farther permanent advance is not contemplated. The position taken up, therefore, has reference to the lines of communication behind it and to those by which it is approached from the side of the enemy; those which it covers and those by which it is threatened. Napoleon, in 1796, made the line of the Adige his front of defense, thereby covering all the ground in his rear and securing the use of it for the supply of his army. Thus, too, the British fleet at San Fiorenzo Bay, Corsica, in 1794–1796 rested on that bay as a base, and maintained thence its front of operations before the gates of Toulon. This kept in check a powerful French fleet in the port, covered the communications with Gibraltar, and secured the Mediterranean for British trade.

When too much is not risked thereby, the line should be advanced to include cross-roads or narrow passages that are near to. Though the open sea has not natural strategic points, yet the crossing of the best mercantile routes, the difficulties of strong head winds and adverse currents, will make some points and some lines more important than others. The occurrence of strong harbors, possibly shoal water, or other difficulties to navigation, may affect the tracing of the line laid down to be held. A fleet, for instance, advanced to the Mona Passage and resting upon no nearer fortified port than those in Cuba, might yet venture to establish in Samana Bay a depot of coal, which would facilitate its remaining on the ground, yet the loss of

which would not be a vital injury, in case of defeat. An advance of the enemy being expected, everything that delays or that makes farther advance hazardous is useful. The fleet, it cannot be too often repeated, is the chief element of strength in naval warfare; but the fleet with strong points to support it is stronger than the fleet alone.

We have now brought our expeditionary fleet, which has hitherto been on the offensive and advancing, to a standstill. The efforts which it has made, the losses which it has undergone, by battle, or by detachments necessitated by its lengthening lines, the difficulties in front, all or some of these lay upon it the necessity of stopping for a time, as did Napoleon in the case I have just cited. This stoppage will be for the purpose of securing conquests made; of strengthening the supply ports in the new base, so that the defense of them may be thrown upon the land forces, thus releasing detachments of ships hitherto tied to them; of storing in these ports supplies in such quantities as to be independent, for a long time, of the mother country and of the first line of communications which connects with it. When Bonaparte had established himself at Verona and on the Adige, he not only had useful control of all Italy south and west of that position, except the besieged fortress of Mantua; he also had placed the communications nearest to France so remote from interruption, that detachments once necessary to guard them were no longer required for that purpose. The communications were as if in France itself.

These processes amount to a military occupation of the conquered positions, incorporating the conquest militarily with the home country; and will result in releasing the navy, in great measure, from the direct defense of the conquered ports, in which at first it will have to aid. By such establishment of the advanced position, dependence upon the original lines of communications is lessened, and the burden of defending them diminished. The detachments

thus released will join the fleet, and, with other reinforcements sent from home, may so increase its strength as to enable it again to take up the direct offensive; a step which will be made upon the same general strategic principles as have already been given for the first advance.

It will remain, therefore, to consider more particularly the principles governing a defense, which have at times been alluded to in speaking of the opponent's action during your own advance.

Suggestions for defense cannot be as satisfactory, superficially at least, as those for offense, because the defensive is simply making the best of a bad bargain; doing not the thing it would like to do, but the most that can be done under the circumstances.

It is true that in certain respects the defensive has advantages, the possession of which may even justify an expression, which has been stated as a maxim of war, that "Defense is a stronger form of war than Offense is." I do not like the expression, for it seems to me misleading as to the determinative characteristics of a defensive attitude; but it may pass, if properly qualified. What is meant by it is that in a particular operation, or even in a general plan, the party on the defense, since he makes no forward movement for the time, can strengthen his preparations, make deliberate and permanent dispositions; while the party on the offensive, being in continual movement, is more liable to mistake, of which the defense may take advantage, and in any case has to accept as part of his problem the disadvantage, to him, of the accumulated preparations that the defense has been making while he has been marching. The extreme example of preparation is a fortified permanent post; but similar instances are found in a battle field carefully chosen for advantages of ground, where attack is awaited, and in a line of ships, which by the solidarity of its order, and deployment of broadside, awaits

an enemy who has to approach in column with disadvantage as to train of guns. In so far, the *form* taken by the defense is stronger than the *form* assumed for the moment by the offense.

If you will think clearly, you will recognize that at Tsushima the Japanese were on the defensive, for their object was to stop, to thwart, the Russian attempt. Essentially, whatever the tactical method they adopted, they were to spread their broadsides across the road to Vladivostok, and await. The Russians were on the offensive, little as we are accustomed so to regard them; they had to get through to Vladivostok — if they could. They had to hold their course to the place, and to break through the Japanese, — if they could. In short, they were on the offensive, and the form of their approach had to be in column, bows on, — a weaker form, — which they had to abandon, tactically, as soon as they came under fire.

In our hostilities with Spain, also, Cervera's movement before reaching Santiago was offensive in character, the attitude of the United States defensive; that is, he was trying to effect something which the American Navy was set to prevent. There being three principal Spanish ports, Havana, Cienfuegos, and Santiago, we could not be certain for which he would try, and should have been before two in such force that an attempt by him would have assured a battle. We were strong enough for such a disposition. The two ports thus to be barred were evidently Havana and Cienfuegos. The supposed necessity for defending our northern coast left Cienfuegos open. Had Cervera made for it, he would have reached it before the Flying Squadron did. The need for keeping the Flying Squadron in Hampton Roads was imaginary, but it none the less illustrates the effect of inadequate coast defenses upon the military plan of the nation.

The author whom I quote (Corbett, Seven Years' War,

vol. i, p. 92), who himself quotes from one of the first of authorities, Clausewitz, has therefore immediately to qualify his maxim, thus:

"When we say that defense is a stronger form of war, *that is, that it requires a smaller force, if soundly designed*, we are speaking, of course, only of one certain line of operations. If we do not know the general line of operation on which the enemy intends to attack, and so cannot mass our force upon it, then defense is weak, because we are compelled to distribute our force so as to be strong enough to stop the enemy on any line of operations he may adopt."

Manifestly, however, a force capable of being strong enough on several lines of operation to stop an enemy possesses a superiority that should take the offensive. In the instance just cited, of Cervera's approach, the American true policy of concentration would have had to yield to distribution, between Cienfuegos and Havana. Instead of a decisive superiority on one position, there would have been a bare equality upon two. Granting an enemy of equal skill and training, the result might have been one way or the other; and the only compensation would have been that the enemy would have been so badly handled that, to use Nelson's phrase, he would give no more trouble that season, and the other American division would have controlled the seas, as Togo did after August 10, 1904. From the purely professional point of view it is greatly to be regretted that the Spaniards and Russians showed such poor professional aptitude.

The radical disadvantage of the defensive is evident. It not only is the enforced attitude of a weaker party, but it labors under the further onerous uncertainty where the offensive may strike, when there is more than one line of operation open to him, as there usually is. This tends to entail dissemination of force. The advantages of the defensive have been sufficiently indicated; they are essentially those of deliberate preparation, shown in precautions of

various kinds. In assuming the defensive you take for granted the impossibility of your own permanent advance and the ability of the enemy to present himself before your front in superior numbers; unless you can harass him on the way and cause loss enough to diminish the inequality. Unless such disparity exists, you should be on the offensive. On the other hand, in the defensive it has to be taken for granted that you have on your side a respectable though inferior battle fleet, and a sea frontier possessing a certain number of ports which cannot be reduced without regular operations, in which the armed shipping can be got ready for battle, and to which, as to a base, they can retire for refit. Without these two elements there can be no serious defense.

The question for immediate consideration here, however, is not the defense of the home coast, but the defense of a maritime region of which control has been acquired, wholly or in part. Unless this region be very close to the mother country, the power of the nation will not be as fully developed and established as at home. The nearness of the Caribbean Sea gives special value to any judiciously placed acquirements of the United States there, — such as the Panama Canal Zone, Porto Rico, and Guantanamo, as compared with the same in possession of European states. So also the position of Japan in the Farther East confers on her a very marked advantage over every European or American state for sustaining and compacting her power, and for carrying on operations of war. But where the intervening distances are very nearly equal, the maritime region of our present hypothesis lies between the two distant contestants as a debatable land, very much as Germany and the Danube Valley lay in former days between Austria and France. This was the case with the region embracing the West Indies and the thirteen American colonies, during the maritime war associated with

that of American Independence. The islands and the continent, with the intervening seas, were the principal scene of the maritime war, and they were substantially equidistant from the great Powers engaged: France, Great Britain, and Spain. On land, the control of such a remote region depends upon two elements: the holding of certain points as bases, and the maintenance of an active army in the field; but it is according as the army is stronger or weaker than that of the enemy that it takes the offensive or defensive. Now, in a maritime region, the navy is the army in the field.

It is in the defensive that the strong places play their most important part. When an army is advancing in superior force, those belonging to it will be behind — in its rear. They serve then as safe points for the assembling of supplies, of trains, of reinforcements. If well garrisoned, and in secure communication with the army, the latter maneuvers freely.

"It is desirable," says the Archduke Charles, speaking more particularly of the base of operations — but the remark applies also to intermediate points, — "that these points should be fortified so as to be able to leave them to themselves without fear of losing the magazines there established, and not to be obliged to defend them with detachments, which have always the inconvenience of weakening the army. The movements of the general-in-chief, forced before all to cover his magazines and to leave troops to guard them, will never be as rapid nor as bold as if he had the faculty of moving away from them for some time with the certainty of finding them again intact."

The same is true of any naval base of operations, if inadequately defended; and the more useful and necessary it is to the fleet, the greater the hindrance to naval movements which may expose it, when so undefended.

The Archduke spoke from sad experience; if not his own personally, at least that of the armies of his country. The

Austrians, probably because they were of Germanic blood, akin to the countries in which they were operating, did not live off them in the unscrupulous manner then practised by the French. They needed, therefore, large depots, for which they could not always have a fortified town. Consequently, they either had to leave a large body of men to guard them, which weakened the main army, or, if they tried to cover them with the latter, its freedom of movement was seriously impaired.

Note that those extreme advocates of the navy as a coast defense, who decry fortifications, would put the navy in a similar predicament.

It will not be inferred from this that the most strongly fortified places do not demand garrisons; but the strength of the walls represents so many men, and, moreover, troops of a quality unfit for the field may man works. It is just so with a seaport; if it has no fortifications, the navy may have to undertake a great part of the defense; if adequately fortified, the detachment from the navy is released and the defense carried on by troops not fitted for service afloat. Such places are the foundation upon which an offensive best rests; and in regions permanently belonging to a nation, they should be so chosen, with reference to intrinsic fitness and relative position, as to be coördinated into a strategic system, to the power of which each contributes. They must not be too few; neither must they be too many, for to protect and garrison them takes from the numbers of the active army — the army in the field. When, therefore, the number of fortresses exceeds that which is necessary, the active army is not strengthened, but weakened. "France," says Jomini, "had too many fortified places, Germany too few; and the latter were generally bad" (that is, weak) "and unsuitably placed." Under these conditions, it is not to be wondered at that the experience of the French officer and the German Archduke

led the former rather to depreciate and the latter to exaggerate the value of fortified posts.

This question of fortified points of support, depots for supply, and if need be for momentary refuge, assumes peculiar importance in the matter immediately before us — the control of a maritime region external to the country. In such a case the army in the field is preëminently the navy. The land forces will commonly be confined to holding these positions, defensively; expeditionary, or offensive, movements will be for them exceptional. A fleet charged with the protection of such bases, whether at home or abroad, is so far clogged in its movement, and is to the same extent in a false position. An egregious instance at the present moment is the fear in Great Britain of German invasion. This is due to the great inferiority of the army in the British Islands to that of Germany. The British Islands are inadequately garrisoned; they depend for defense upon the fleet alone; and the fleet consequently is tied to British waters. If Great Britain on her own soil could meet Germany man to man, equal in numbers and in training, the fleet would have relatively a free foot. It could afford, for example, to spare a detachment to the Mediterranean, or to China; retaining at home only a reasonable superiority to a possible enemy. As things are, since all depends upon the fleet, the fleet must have a wider margin of safety, a crushing superiority; that is, its freedom of movement and range of action are impaired greatly, by the necessity of keeping with it ships which under other conditions might be spared.

A navy may be thrown perilously upon the defensive in its general action in a particular region, because obliged to cover two or more points inadequately protected by fortification or army. Thus, in 1799, the unexpected entrance of twenty-five French battleships into the Mediterranean turned everything upside down, because so many points were

thought to need protection, and could receive it only from the fleet, because they were inadequately garrisoned; a precise reproduction, on a smaller scale, of the present dilemma of the British Islands. Specifically, the British commander-in-chief felt the weight of Minorca; and he used concerning it an expression which is worthy of remembrance as bearing upon the Fleet in Being theory and the Blue Water School. "It is too bad," he said, "that I cannot find these vagabonds," — that is, the French fleet, — "and that I am so shackled by the care of this *defenseless* island." The man who used these words was not a commander of the first order; but he was an officer of more than usual distinction, of capacity proved much above the average, and he here expressed a frame of mind inevitable to the average man. But for the necessity of protecting positions, the British fleet would have concentrated, and would have moved freely at will, and in force, offensively against the enemy. As it was, not knowing the enemy's purpose, it was kept in two principal divisions, neither of them equal to the French whole. One, the main body, covered Minorca and kept moving somewhat aimlessly in the triangle defined by Barcelona, Toulon, and Minorca; the other, under Nelson, covered the approaches to Naples and Sicily. Amid this maze of British perplexity arising from the need of defending several points with the fleet alone, the French acted safely, though hastily, and retired unmolested; taking with them from Cartagena a large body of Spanish ships, which remained in Brest hostages for the alliance of Spain.

It is when thrown on the defensive, that the value of strong places is most felt. The first object, in order, of the defense, is to gain time. It is therefore of advantage that opposition to the enemy should begin as far as possible in front of the vital points of the defense. In Bonaparte's famous campaign in Italy, of 1796, the dexterity of

his strategy and the audacity of his tactics enabled him in two months to cover the ground from Savona, well west of Genoa, to Mantua. There the fortress held him for nine months. Observe that Lombardy, the valley of the Po, then an appendage of Austria, was to Austria just what an external maritime region, the Caribbean for instance, may be to a maritime state like the United States. Though long since lost, Austria perhaps has never reconciled herself to a surrender which shut her off from the Mediterranean, a new approach to which she seems now to be seeking in the Balkans. Mantua was to her an advanced post, which by its effect on the movements of an approaching invader protected, not only the region wherein it itself lay, but the home country behind. Its powerful garrison, like a fleet in a seaport, threatened, and unless checked would control, the French communications as they advanced up the Alps towards the Austrian home territory. Bonaparte had not force enough to oppose to the garrison, and at the same time to move forward. He could not divide, so had to stop; and in the nine months of delay Austria collected and sent against him no less than three successive armies, whom he repelled only by a display of skill, daring, and energy, of which he alone was capable. Two months after Mantua fell, he had progressed so far towards Vienna that Austria asked for peace.

A fortress like Mantua, in a case like this, affords a striking instance of defense being a strong form of war, and also of the advantage of opposition to an enemy's approach beginning as far as possible in advance of the home territory. It is perhaps an extreme example. Yet, all the while, Bonaparte was showing how much stronger in spirit, and in effect, offense is; for, while holding his position in Verona and on the Adige, which was his base of defense, it was by rapid offensive movements, resting on these positions, that he disconcerted the enemy, who, being taken

continually by surprise by the French initiative, was forced on the defensive and ultimately compelled to retreat. To the offensive belongs the privilege as well as the risks of the initiative; and the distinguishing value of the initiative is that its purpose, known to itself, is one, is concentrated. The defense, being ignorant of its opponent's purpose, to which it is compelled to conform its dispositions, feels endangered in more directions than one. Its tendency therefore is to dissemination, as that of the offense is towards concentration.

It is to be observed that conditions like Mantua may not always exert the like effect upon the movements of a fleet, because ships carry in their holds much of that which communications mean to an army. For example, in 1801, after the battle of Copenhagen and destruction of the Danish fleet, Nelson wished to proceed at once up the Baltic against a strong Russian naval detachment lying at Revel; but his commander-in-chief was unwilling to advance, leaving Denmark still hostile in his rear and unsubdued. This could mean only sensitiveness about communications, which for such an enterprise was pedantic; because the going and coming would not have exhausted the British resources, whereas the destruction of the Russian division was of military and political importance. Nelson admitted the risk, but urged the superior necessity of taking it. He was overruled, and the Russians escaped. Such a rapid dash has something of the nature of raids, which characteristically disregard communications. If, instead of such sudden attack, the purpose had been a prolonged operation, — a blockade for instance, such as then maintained before French ports, — supplies for the fleet in the Baltic must pass within gunshot of Danish batteries, which therefore must be reduced. If, besides the batteries, a Danish naval division were there, a British naval division must balance it also. If the Revel and Copenhagen bodies, taken together,

had equalled or exceeded the British numbers, division of these would have been inexpedient; and Copenhagen must first be subdued, as Bonaparte had to reduce Mantua. For modern fleets, the exigencies of coal renewal aggravate such a situation.

When inferior to the enemy, an army in the field must fall back, disputing the ground if possible, until the advanced line of fortified strategic points is reached. As it passes that line, it has to strengthen the points in proportion to their needs, to its own present strength, and to its hopes of reinforcement. To shut itself up in one of the fortresses, as Mack at Ulm, McMahon at Sedan, Bazaine at Metz, whether justified by the situation or not, is a counsel of despair, so far as that army is concerned. The general military situation may require the step, but it is a confession of disaster. When the pursuing enemy reaches the line of fortified posts, the question presents itself to him: "Shall this point be taken before going farther, or shall I leave only enough force here to prevent its garrison acting against my communications?"

If the decision be to besiege, time is lost; if to proceed, the pursuing army is weakened relatively to the pursued. This weakening process goes on with each place observed, but the pursuer may be better able to stand it than the pursued. An inferior force outside, not intending to besiege, may adequately check a superior distributed in two or more places, because the different detachments cannot combine their movements, and the inferior has the advantages of central position and interior lines. Moreover, the pursuer is necessarily superior, and may be greatly superior; and as he passes on he endangers or destroys the lines of supply to the place, the fall of which then becomes a question of time. These considerations show both the value and the limitations of fortified points. Their passive strength, however great, can never bring about the results

which may be attained by a skillfully handled army in virtue of its mobility.

Warfare at sea does not seem to present a very close analogy to the case of an inferior army retreating before a superior, disputing its progress by resistances which take advantage of successive accidents of the ground, that contribute to the stronger "form" of war which defense is. Yet we have historical parallels, which to say the least are suggestive. Such is that of Nelson off Sicily in 1799, with less than a dozen battleships, expecting the approach of a French supposed nineteen, — actually twenty-five, — and intending to fight rather than let them occupy the places he was set to defend; and again, in 1805, when returning from the West Indies to Europe with twelve ships and expecting to meet eighteen to twenty enemies. In both cases he was animated with the same purpose, expressed in the words, "By the time they have beaten my division, they will give no more trouble this year." He meant, of course, that his share in the whole action of the British navy was one incident in the process of beating the enemy in detail; leaving the rest of the British force to finish the remainder. This corresponds essentially with the action of the southern Austrian force of the Archduke Charles, in 1796, which had as its share to occupy Moreau by retreat, fighting at every defensible point, while the Archduke himself with the northern troops turned upon Jourdan in overwhelming numbers.

Doubtless, too, in the first instance, Nelson had in his mind the same purpose that he explicitly stated in the second: "I will not fight until the very last moment, *unless* they give me an opportunity too tempting to be resisted," — that is, a clear momentary advantage. An advantage is an advantage, however offered or obtained; whether by an enemy's mistake, or by the accidents of the ground that play so large a part in land war; and on either element a

skillful defense looks warily for its opportunities to the enemy's mistakes, as well as to other conditions. Napoleon is reported to have said at Austerlitz, when urged to seize an evident opportunity, "Gentlemen, when the enemy is committed to a mistake, we must not interrupt him too soon." The comprehensive rôle of the British navy in the wars of Nelson's time was defensive, and in broad strategic lines it followed Bonaparte's practice; that is, its dispositions were such as to constitute original advantage, to assume the offensive promptly when occasion arose, and to fight at advantage when opportunity offered. So, when leaving the Mediterranean early in 1805 to pursue the French to the West Indies, Nelson met a convoy of reinforcements for Malta, a defensive measure. Pressed as he was for time, he waited till all arrangements for its safe arrival were perfected. He looked out for his bases of defense, while himself bound on an errand of offense.

At sea, as on land, fortified posts are necessary. Their importance is perhaps even greater, because the field in which fleets act rarely offers positions — due to the contour of the ground — by which an inferior force by tactical dispositions can lessen the odds against it. The need of refuge, and of security for resources, is greater. The old advantage of the wind is represented by greater speed, and the fleet speed of a few ships is likely to be greater than that of a larger number. The more numerous the ships of one fleet, the more likely to be found among them, not only the fastest, but also the slowest in the two forces; and fleet speed is not an average, but the speed of the slowest. The fleet speed of the more numerous fleet is consequently likely to be less. This consideration shows that precipitate flight to the support of its ports may not be necessary to the retreating fleet, especially if, as is possible, the approaching navy is convoying land forces in transports.

Still, considering the open nature of the field, it may be

said that the retreating fleet, if greatly inferior, should not let the assailant get within striking distance. There seems reason to say that it should fall back, proportioning its speed to that of the approach, with fast cruisers in its rear keeping sight of the enemy, and with communication established between them and the main body. The enemy's light vessels will, of course, try to drive these off, but they cannot follow them into their own fleet, nor can they prevent their return. Granting equal speed, the cruisers of the pursuing fleet cannot overtake. They can only keep those of the retreating at a certain distance from the pursuers' main body, which will be of less advantage, because their own presence reveals the nearness of their main force. The retiring cruisers must not fight, unless with special advantage; because, if crippled, they will fall into the hands of the approaching enemy. The utmost, then, that we can say for the weaker fleet of the defendant, under these circumstances, is that it should keep as near the invader as feasible, waiting to seize any advantage that may turn up. *How* to seize such advantage belongs rather to the province of tactics; as, indeed, does the whole conduct of such a retreat. Granting equal speed and professional skill to begin with, a smaller number can generally move more rapidly than a larger, and are more easily handled. How the larger should move, in what order, how protect its convoy; how the smaller should conduct its retreat, what possibilities of harassing attack are presented by modern conditions, and the best method of making them — all these things belong to the province of Grand Tactics, rather than of Strategy.

When the retreating fleet has reached the outer line of its fortified ports, — the first line of defense, — the two parts of the defendant's force, his fleet and ports, are united. The question then arises of the use to be made of the fleet. The approaching enemy is, by the supposition,

superior on the sea; and also on land, at least as to the particular objective he has first in view. If there be but a single port of the defendant's, the case is very serious, for his supply of coal becomes precarious. If the single port is so ill fortified that it cannot hold out a respectable time, the situation, as regards the particular region, is almost desperate.

As, however, there is no object in discussing desperate cases, but only those where inferiority is not so great but that skill and activity may partially compensate for the inequality, we will assume that there are two or more ports reasonably defended, in position to afford support to each other, yet not so near together that an enemy can watch both without dividing his fleet. The aim now of the defendant's fleet — the weaker fleet — is threefold: the battleships should be kept together; they should endeavor not to be shut up in either port; and the battle fleet should not allow itself to be brought to action by the superior force, unless favored by circumstances. If uncertain as to the point first aimed at by the enemy, it will take the most favorable position for reaching either and wait further indications. Thus Nelson, at such a moment of uncertainty, as to whether the French fleet, escaped from Toulon, were bound to Egypt, or to the Atlantic, wrote, "I will neither go to the eastward of Sicily, nor to the westward of Sardinia, until I know something positive." Togo at Masampo affords another illustration; but less striking, because with fewer elements of doubt.

In choosing its local base of action, its point of concentration for the general defensive, of which it itself is a principal factor, the defendant fleet should consider seriously, among other things, which port is most likely to be the object of the enemy's shore operations; because, if that be ascertained, some other position will probably be better for itself. Thus, there were several reasons for presuming

that the Japanese would prefer to land in the neighborhood of Port Arthur, and would attack that place. Consequently, the Russian fleet, if intending to postpone battle, or to decline it, would be better in Vladivostok; because, by taking position in Port Arthur it enabled, and even induced, the enemy to concentrate both fleet and army at one point, which thus became strategically, though not geometrically, a central position, occasioning the Japanese no temptation to eccentric movements. The Russian battle fleet at Vladivostok would draw thither necessarily the main Japanese fleet, and so would open larger possibilities to the Russian cruising divisions for action against the communications of the Japanese army. That Vladivostok has two entrances is an additional reason.

If the first objective be strong enough to require prolonged operations to reduce it, the enemy's fleet will be tied to that point wholly or in part. Even if it take no share in the direct attack, it will have to cover the communications of its army at their point of arrival, the most critical link of the chain connecting the army with home, and must block the use of the port to the defendant's shipping as a coaling or supply station. Only the fall of the place can wholly release the fleet of the assailant. It therefore will have two duties: one, to support the land attack, the other, to check any mischief set on foot by the defendant's navy. If the latter be wise and active, both duties cannot be attempted without some division of the attacking fleet. In the case supposed, the admiral of the defendant fleet enjoys the advantage of the initiative, in that his object is only one, however many ways of compassing it may offer. This advantage he has, because, although his country is on the defensive, and therefore his fleet also, the particular function of the fleet in the general scheme of defense is to take the offensive against the enemy's communications, or against his detachments, if such are made; in general, to

divert and distract. As against these diversions and alarms, the fleet of the offense has to defend. Therefore it has two necessary objects, viz.: the hostile fleet and the hostile port, unless the defendant plays into his hands by letting his fleet be caught in the besieged port, as the Russians did at Port Arthur.

Let us suppose, for example, that the line of defense for a United States fleet was the Atlantic coast, — with the two ports of Norfolk and New York well fortified, — the United States navy inferior, but still strong. If the great commercial importance of New York determined the enemy's attack there, the United States fleet being in Norfolk would constitute two objects for the hostile navy and impose a division of force; otherwise, the United States navy, being left free to act, might attack any of the enemy's interests — trade, communications, colonies. If New York were the enemy's objective, and had but one entrance, it would, in my opinion, be a mistake to put the fleet there; but with two, they by themselves impose divergence. The introduction of wireless telegraphy will modify these considerations; but in view of weather conditions, and of the total advantages attendant upon the initiative, namely, that the choice of time, place, and manner is with the departing fleet, wireless can only modify, cannot annul.

It can scarcely be repeated too often that when a country is thrown on the defensive, as regards its shore line, the effectual function of the fleet is to take the offensive. Hence, in another part of this course, I have said that coast fortresses are not essentially defensive in character, as commonly esteemed, but offensive; because they guard the navy which is to act offensively. The instance of John Rodgers' squadron in 1812, though on so petty a scale, remains entirely in point. The United States, having almost no navy, nor army, was on the defensive; but the sailing of Rodgers' squadron was a step of general offense against

British trade and naval detachments. Consequent upon it, British detachments had to concentrate, because weaker than Rodgers' whole; and American ports remained open for the returning merchant ships. Forgetfulness or neglect of this consideration was a leading factor in the Russian mismanagement of their fleet. It is immaterial whether the defensive is the original attitude of the nation, as in these cases of Russia and the United States, or whether it results from defeat upon the sea and retreat to home waters. When retreat is over, and the opportunity of harassing the advancing enemy, whether well or ill improved, has passed away, the defendant fleet is tied down to nothing except keeping the bunkers full; a weighty exception, it will be admitted, which we owe to steam. Still, it is a great thing to have no other cares, to be tied to no other duties.

On the supposition of proper fortification for the ports of the coast line, they are able to look out for themselves during a given time. The duty of the defendant admiral, then, is to strike at the communications of the enemy; to harass and perplex his counsels by attacks or threats, in every possible direction; to support the general defensive, by himself taking the offensive. The skill of the admiral or government charged with the direction of such operations will be shown by the choice of those objects of attack which will most powerfully move the enemy. The history of war is full of instances where sound military principles have been overridden by political or sentimental considerations, by lack of military skill in the commanders of fleets and armies, or of moral courage to bear a great responsibility. The object of the defense will be to play upon such weaknesses of human nature, with a view to make the offensive divide his forces. The impulse to try to protect every point can only be overcome, like other natural infirmities, by sound principles firmly held. At the time of

our hostilities with Spain, the Navy Department was besieged with applications from numerous points of the coast for local protection. The detention of the Flying Squadron at Hampton Roads, as well as of a patrol force on the North Atlantic coast which would have been better employed in blockade and dispatch duty, may be considered concessions to this alarm. They certainly were not in accord with sound military principle.

The result aimed at by such operations of the defendant navy has been styled "displacement of force" by a recent French writer on Naval Strategy, Commander Daveluy. The phrase appears to me apt and suggestive. By it he means that, assuming the enemy to have disposed his forces on sound military principles, he is to be provoked, or allured, or harassed, or intimidated, into changing those dispositions, into displacing his forces. Over-confidence may be as harmful as over-caution, in inducing displacement. If properly concentrated, the hostile ships may be moved to disseminate; if correctly posted, to remove to a worse position. The capture of the Guerrière by the Constitution was due to a displacement of British forces. Rodgers' sailing in squadron had compelled the British to concentrate, and for the same reason to convoy an important West Indies fleet several hundred miles eastward in the Atlantic. There it was thought safe to detach the Guerrière to Halifax. On her way she met the Constitution.

I quote from Daveluy a few paragraphs:

"The maritime defensive, from whatever point of view regarded, offers only disadvantages. It may be imposed; it never should be voluntarily adopted. On the one side as on the other, we are led to choose the offensive; that is to say, to seek the enemy with the object of fighting him. But the two parties will not do this by the same methods.

"The stronger will hasten to meet the different divisions of the enemy, in order to destroy them before they have

time to injure him. The weaker" — whom I have called the defendant — "will seek first of all to withdraw from touch of the enemy in order by uncertainty as to the points threatened to effect displacement of the hostile force, and to give rise to the unforeseen; then he will try to draw his enemy to a field of battle where his own feebler units can come into play advantageously. So long as this stage lasts, and until a decisive action has inclined the balance definitely, the immediate objects of the war are postponed to the necessity of first engaging the enemy under favorable conditions. In this game, the more active, the more skillful, the more tenacious and the better equipped will win.

"At the opening of a war especially, the offensive will produce decisive results. If successful in anticipating the projects of the enemy by impetuosity of attack, the general operations receive the predetermined direction; a situation is created which overthrows all the enemy's expectations, and paralyzes him, unless he succeed in retrieving his condition by a victory. The very fact of being forced into an unexpected situation puts him in a state of inferiority, and prevents him from recovery, while at the same time your own forces can be better utilized."

This effect was strikingly produced upon the Russians by the first successful surprise by the Japanese.

"The characteristic of the offensive is that it makes the attack instead of accepting it; this is evidenced in history by the fact that almost all naval victories have been gained upon the enemy's coast."

If, in the shock of war, all things in both sides were equally strong, there could be no result. On the other hand, when inequality exists, the weaker must go down before the stronger. It is in converting inequality or inferiority into superiority at a given point that the science, or rather the art, of war consists. The principles upon which this art is based, we are assured by the best authorities, are few and simple; and they are summed up in one great principle, that of being superior to the enemy at the

decisive point, whatever the relative strength of the two parties on the whole. Thus the Russian navy in the aggregate was much superior to the Japanese, but, being divided, was inferior to the enemy upon the immediate scene of war; and this inferiority at the decisive point was increased by the sudden action of the Japanese in opening hostilities.

It is in the application of sound general principles to particular problems of war that difficulty arises. The principles are few, the cases very various, the smaller details almost infinitely numerous. Here experience enters — experience which, under the other form of the word, *experiments*, lies at the basis of all our science. But how shall experience of war be acquired in the absence of a state of war? And even amid constant war, how shall any one man, particularly a subaltern or naval captain, find in his own experience all, or any large portion of the innumerable cases that may and do arise? No one will answer that he can so find them; but if one be found bold enough to affirm he can, I throw myself back upon the words of great captains. The Archduke Charles writes:

"A man can become a great captain only with a passion for study and a long experience. There is not enough in what one has seen oneself; for what life of a man is fruitful enough in events to give a universal experience; and who is the man that can have the opportunity of first practicing the difficult art of the general before having filled that important office? It is, then, by increasing one's own knowledge with the information of others, by weighing the conclusions of one's predecessors, and by taking as a term of comparison the military exploits, and the events with great results, which the history of war gives us, that one can become skillful therein."

The first Napoleon similarly says:

"Make offensive war as did Alexander, Hannibal, Cæsar, Gustavus Adolphus, Turenne, Prince Eugene, Frederick the Great; read and reread the history of their eighty-three campaigns, model yourself upon them; it is the only

means of becoming a great captain and of surprising the secrets of the art. Your mind thus enlightened will make you reject maxims opposed to those of these great men. . . . The history of these eighty-three campaigns, carefully told, would be a complete treatise on the art of war; the principles which should be followed in offensive and defensive war would flow from it as from a spring."

Again he says:

"Tactics, evolutions, the science of the engineer and of the artillerist, may be learned in treatises, almost like geometry; but knowledge of the great operations of war is acquired by experience, and by the study of the history of wars and of the battles of great captains."

There is yet another and deeper thought underlying the advice to study the campaigns of great commanders. It is not merely that the things they have done become a catalogue of precedents, to which a well stored memory can refer as special cases arise for decision. Such a mechanical employment of them has its advantage, can be consigned to treatises, and can be usefully taught to those who will learn nothing otherwise. But, beyond and above this, it is by that diligent study which Napoleon enjoins that the officer who so lives with those men absorbs not merely the dry practice, but the spirit and understanding which filled and guided them. There is such a thing as becoming imbued with the spirit of a great teacher, as well as acquainted with his maxims. There must indeed be in the pupil something akin to the nature of the master thus to catch the inspiration, — an aptitude to learn; but the aptitude, except in the rare cases of great original genius, must be brought into contact with the living fire that it may be itself kindled.

It is something like this, doubtless, that Napoleon meant when he drew the distinction quoted, between the elementary parts of the art — tactics, evolutions, etc. — and the conduct of great operations, which can be acquired only by

experience and in the study of history. This he elsewhere expresses in a warning against dogmatizing on such matters:

"Such questions, propounded even to Turenne, to Villars, or to Prince Eugene, to Alexander, Hannibal, or Cæsar, would have embarrassed them greatly. To dogmatize upon that which you have not practised is the prerogative of ignorance; it is like thinking that you can solve, by an equation of the second degree, a problem of transcendental geometry which would have daunted Lagrange or Laplace."

Jomini, who fully agrees with the two leaders about the study of history, expresses the same idea by saying that the successful conduct of war is not a science, but an art. Science is sure of nothing until it is proved; but, all the same, it aims at absolute certainties, — dogmas, — towards which, through numerous experiments, it keeps moving. Its truths, once established, are fixed, rigid, unbending, and the relation between cause and effect are rather laws than principles; hard lines incapable of change, rather than living seeds. Science discovers and teaches truths which it has no power to change; Art, out of materials which it finds about it, creates new forms in endless variety. It is not bound down to a mechanical reproduction of similar effects, as is inanimate nature, but partakes of the freedom of the human mind in which it has its root. Art acknowledges principles and even rules; but these are not so much fetters, or bars, which compel its movements aright, as guides which warn when it is going wrong. In this living sense, the conduct of war is an art, having its spring in the mind of man, dealing with very various circumstances, admitting certain principles; but, beyond that, manifold in its manifestations, according to the genius of the artist and the temper of the materials with which he is dealing. To such an effort dogmatic prescription is unsuited; the best

of rules, when applied to it, cannot be rigid, but must have that free play which distinguishes a principle from a mere rule.

Maxims of war, therefore, are not so much positive rules as they are the developments and applications of a few general principles. They resemble the ever varying, yet essentially like, forms that spring from living seeds, rather than the rigid framework to which the free growth of a plant is sometimes forced to bend itself. But it does not therefore follow that there can be no such maxims, or that they have little certainty or little value. Jomini well says,

"When the application of a rule and the consequent maneuver have procured victory a hundred times for skillful generals, shall their occasional failure be a sufficient reason for entirely denying their value and for distrusting the effect of the study of the art? Shall a theory be pronounced absurd because it has only three-fourths of the whole number of chances in its favor?"

Not so; the maxim, rooting itself in a principle, formulates a rule generally correct under the conditions; but the teacher must admit that each case has its own features — like the endless variety of the one human face — which modify the application of the rule, and may even make it at times wholly inapplicable. It is for the skill of the artist in war rightly to apply the principles and rules in each case.

It is thus we must look upon all those rules of war that are advocated before us. The teacher who, without the tests of large experience, dares to dogmatize, lays himself open to the condemnation pronounced by Napoleon. But, on the other hand, men who deliberately postpone the formation of opinion until the day of action, who expect from a moment of inspiration the results commonly obtained only from study and reflection, who hope for victory in ignorance of the rules that have generally given victory, are guilty of

a yet greater folly, for they disregard all the past experience of our race.

I end with an apposite quotation from the Archduke Charles:

"A general often does not know the circumstances upon which he has to decide, until the moment in which it is already necessary to proceed at once with the execution of the necessary measures. Then he is forced to judge, to decide, and to act, with such rapidity that it is indispensable to have the habit of embracing these three operations in a single glance, to penetrate the consequences of the different lines of action which offer, and to choose at the same moment the best mode of execution. But that piercing perception which takes in everything at a glance is given only to him who by deep study has sounded the nature of war, who has acquired perfect knowledge of the rules, and who has, so to speak, identified himself with the science. The faculty of deciding at once and with certainty belongs only to him who, by his own experience, has tested the truth of the known maxims and possesses the manner of applying them; to him alone, in a word, who finds beforehand, in his positive acquirements, the conviction of the accuracy of his judgments." "Great results can be obtained only by great efforts."

"Upon the field of battle," says the great Napoleon, "the happiest inspiration is most often only a recollection."

CHAPTER XI

APPLICATION TO THE GULF OF MEXICO AND THE CARIBBEAN SEA

THE present study of the Caribbean Sea and the Gulf of Mexico, regarded as a possible field of maritime warfare, discards the consideration of the relative armed forces that may be brought into play by any of the parties now or at any time in territorial occupation; or, which amounts to the same thing, equality of naval force between opposing sides is assumed.

The study, therefore, is one of strategy as involved in *positions* only; a study which consequently takes account of both military and commercial values. Commercial value cannot be separated from military in sea strategy, for the greatest interest of the sea is commerce. It may be recalled here that Napoleon defined war as being, among other things, "a business of positions." An interesting illustration, or application, of this saying is to be found in his Commentaries; where, in discussing military operations in a desert, in connection with his own Syrian expedition in 1799, he names the positions of wells as being the most decisive strategic factor in a country generally waterless.

In beginning the study of any theater of land warfare it is necessary, first, to define clearly the outlines which limit the subject; and secondly, to take a comprehensive yet not too detailed view of the natural features which exert a decisive influence upon the strategic plan. The first step is arbitrary and for the sake of convenience, that both teacher and student may know just what they are to consider; the second is essential, arising from the nature of things. The

same processes, and for the same reasons, are suitable to the study of a maritime strategic field. It will be necessary, however, to the intending student, first to get such a knowledge of the theater as will let him decide accurately what does or does not necessarily belong immediately to it; then only can he lay down the limits which he assigns to his task. I will invite you, therefore, to accompany me in examining the reasons which lead to the limits prescribed to our present study.

A great deal of trade and shipping enters the Gulf of Mexico and the Caribbean Sea. Much of it goes no farther, but is distributed through the islands and on various parts of the seacoast. Much, however, goes beyond; and in the nature of things as they now are, and still more when man shall have modified nature by running a canal through the Central American Isthmus, the Gulf, and still more the Caribbean, have, and will increasingly show, the characteristics of highways of trade, rather than of the end of a route.

The interests of nations in the sea are almost wholly interests of trade — of carriage. The productions of the sea, though valuable, are trifling in amount as compared with those of the land. Its great value to mankind is that it furnishes the most copious means of communication and traffic between peoples; often the only means. By general consent and international law it is a common property, a great plain free to all, across which run many highways. All nations have a common interest in all parts of this great property; but that interest naturally becomes greatest at points where, for any reason, many highways meet — or part.

In the special field proposed for our study, there are two principal points of such convergence — or divergence: the mouth of the Mississippi River, and the Central American Isthmus. At the time when these lectures were first

written the opinion of the world was hesitating between Panama and Nicaragua as the best site for a canal through the Isthmus. This question having now been settled definitively in favor of Panama, the particular point of convergence for trade routes passing through the Caribbean for the Pacific will continue at Colon, whither it for so long has been determined because there is the terminus of the Panama Railroad.

These two meeting points or cross-roads have long been, and still are, points of supreme interest to all mankind. At the one all the highways of the Mississippi valley, all the tributaries and subtributaries of the great river, meet, and thence they part. At the other all highways between the Atlantic and Pacific focus and intersect. The advancing population and development of the Mississippi valley, and the completion of the Panama Canal, will work together to cause this international interest to grow proportionately in the future. Among the great Powers of the world, no one is concerned so vitally in this progress as is the United States; because of her possession of one of these centers, the mouth of the Mississippi with its huge back country, and because of her geographical nearness to the other. This peculiar interest, which is natural and inevitable in virtue of proximity, is emphasized by the national policy known as the Monroe Doctrine; and still more by the particular result of the Doctrine which has involved the control, administration, and military protection of that belt of Isthmian territory called the Panama Canal Zone. This specific responsibility, recently acquired and assumed, is itself simply a later phase of the old treaty relations with the Republic of Colombia, guaranteeing security of transit; in virtue of which the United States in 1885 took armed possession of the territory traversed by the Panama Railroad, in order to maintain and secure the use of the road to peaceful traffic.

The successive political development of much of the Caribbean region,— of nearly all of it which is not in possession or control of the United States, or of some European state,— has been in the past, and still continues, so precarious as to introduce a very disturbing factor into international relations; and this has a consequent effect upon the military and strategic possibilities of the future. Illustrations of recent occurrence are the dispute between Venezuela and Great Britain concerning their boundary line, leading to the strong interposition of the United States; the armed demonstration by Great Britain, Germany, and Italy in Venezuela; the difficulty between the United States and Colombia, which led to the independent existence of the Republic of Panama; also the contentions between the United States and Venezuela. In the same connection are to be cited the long controversies with Great Britain concerning the Isthmus of Panama and its canal, finally settled by the Hay-Pauncefote treaty.

These recent instances, collated with the history of the seventy years preceding the earliest of them, leave little doubt that the Monroe Doctrine alone has stood in the way of the appropriation by foreign states of much of the Caribbean countries in the same manner as the countries of Northern Africa, Algiers and Tunis, have been annexed by France, and Egypt effectually controlled by Great Britain. Morocco also has become a bone of contentions which have closely approached war, because there was no one Great Power exclusively concerned, as the United States is in America, with an established and recognized policy like the Monroe Doctrine. The present uncertainties and anxieties concerning the security of the "Open Door" in the Far East, centering in Manchuria and around its railroad development, proceed from the same general cause, viz.: the political weakness of the owning country, China, and the aggressive policies of foreign states; whether

those policies are rival, as until lately was the case, or become "pooled," as is said to be the present condition between Russia and Japan.

Such regions, rich by nature and important both commercially and politically, but politically insecure, compel the attention and excite the jealousies of more powerful nations. The rights of stable, strongly governed states are admitted; and if they exercise those rights in a manner onerous to others, the burden is usually acquiesced in and borne until lightened by treaty or other peaceful arrangement. But when the government is feebly administered, and the probability is that it cannot endure indefinitely, it becomes a matter of importance to other states what is to succeed, and what effect coming changes may have on the welfare of their subjects and upon their own political safety. England, in 1878, helped Austria to the administrative control of Bosnia and Herzegovina; Austria repaid the debt by laying upon English goods differential duties that did not before exist, and since then has utilized the position of advantage then attained to incorporate the two provinces, politically, with her own territory, in the teeth of British remonstrance. This is one instance, among many, of the way in which the interests of peoples, and consequently of states, are mixed up in the future disposition of countries the present owners of which may lose political control through political incapacity. Military and strategic conditions may draw more attention than such economic results, but are not of greater consequence. Such jealousies among rival nations often prolong the existence of a government that would otherwise go down before one of the competitors, as has been notoriously the case with Turkey, and still is with Morocco.

Since these lines were written the annexation of Korea by Japan has supplied another instance; and the very assurance that customs duties there shall remain unchanged

for ten years certifies also that at the end of that period the advantage of other trading peoples will give place to Japan's estimate of her own. "Manchuria," says an instructed correspondent of the London *Times*,[1] "is dominated throughout its vast length and breadth by Russia's and Japan's rights of ownership in the Chinese Eastern Railway. The present position of affairs clearly foreshadows the extension of Japanese predominance from those thin lines of steel to ever widening spheres of activity;" and he goes on to speak of the fate which is slowly but surely separating Manchuria from the Chinese Empire, as due to the weakness of the Chinese Government and the consequent "economic gravitation" towards Japan, and accordingly away from other commercial nations.

"There is an argument," says Sir Charles Dilke, "by which an anti-Russian policy in the Balkans can be recommended, and which appeals to John Bull with peculiar strength. It is the breeches-pocket argument. Every country annexed, or virtually annexed by Russia, is closed forever to our trade by means of heavily protective duties." And again, "There is one loss by a Russian occupation of the remainder of the Turkish dominions which no British government would willingly face. It is the loss of trade. In the Asiatic provinces acquired by Russia at the end of the last Turkish war, where there used to be a considerable British trade, there is now none; for it has been killed by protective duties. Russia at Constantinople would mean our exclusion from the Black Sea trade, except the wheat trade *out* of Russia. Our commercial interests in Asia Minor are very large and they are absolutely jeopardized by any further Russian advance."

Although these words of Dilke were written nearly thirty years ago, they have lost none of their force; because the nations of the world since then have become rather more protectionist than they then were. At this moment we are

[1] The *Mail* (tri-weekly *Times*), March 28, 1910.

confronted with a similar condition of national jealousies and rivalries, of which the phrase "The Open Door" has become the recognized expression. Commercial problems change, as do those of strategy; but the underlying principles remain through all.

The Gulf of Mexico and the Caribbean, taken together, form a kind of inland sea, or Mediterranean. The boundary lines are traced by the Florida peninsula, Cuba, Haïti, and the Lesser Antilles, or Windward Islands, on the one side; and on the other by the different countries on the American continent, from the United States to Venezuela inclusive. In these two ranges of boundaries, as now possessed, we may see another resemblance to the Mediterranean: on the one hand states of European traditions, actually or relatively strong and stable; on the other, a condition of things rising, in political results, little above the level of Barbary Powers.

Entrance to this inland sea of America from the Atlantic ocean is on its northern and eastern sides only, but by many passages: the Straits of Florida, the Windward Passage, the Mona Passage, and so on, eastward, through the numerous channels separating the smaller Antilles. On the western side, the unbroken mainland forbids water transit; and the general absence of navigable rivers, or other adequate means of internal communication, allows only the eastern slope of the countries to be supplied from these seas. Goods meant for the Pacific slope of Central America and Mexico have to be transshipped by the Isthmus. On the northern and southern shores, the basins of great rivers — the Mississippi, Magdalena, and Orinoco — obviate this inconvenience; wholly or in part.

The different passages into the sea in question have different values, but all have some, and all must be included in our examination. These values may, and generally will, be affected by both military and commercial considerations,

and in any complete examination both these elements must be duly weighed. It will often happen that military importance will attach to a passage of small commercial value, and *vice versâ*. One that is very important to the trade of a country cannot, indeed, be indifferent in the point of view of military control; but it may be beyond the power of the country interested effectively to control it, and in such a case, in war, commercial convenience must yield to the conditions imposed by the limits of the nation's military strength. From a military point of view, we may say that, of the many entrances to the Caribbean, the western ones are the most important, and that the values decrease successively from the Straits of Florida to the Lesser Antilles. This is true not merely as to the United States, and on account of their relative distances from our country, but because of the position, character, and surroundings of the passages themselves. The military importance of such passages or defiles depends not only upon their geographical position, but also upon their width, length, and difficulty. A strait is a strategic point, the value of which, like that of other points, depends: 1st, upon its situation; 2d, upon its strength, which may be defined to consist in the obstacles it puts in the way of an assailant and the consequent advantages to the holder; in other words, in its difficulties; 3d, upon its resources or advantages, such as the facility it gives the possessor for reaching a certain point, or for passing from one of his ports to another; upon its shortening distances, etc.

An important consideration in fixing the value of any passage is whether there be another near it that will serve the same purpose. If so situated that a long circuit is imposed upon the belligerent who is deprived of its use, its value is enhanced; and yet more, if it be the only close link between two bodies of water, or two naval stations, for example, the Dardanelles, or the Strait of Gibraltar. As

regards the strength of a passage at sea, difficulties are created by hydrographic conditions, and by the existence, either above or below water, of obstacles that embarrass the navigator, constrain ships to follow certain paths, and perhaps afford to a fleet guarding the passages a convenient rendezvous, from which it can move with facility against an enemy coming from any direction. Such natural features evidently answer to the strength conferred on a land post by the character of the ground. A glance at the map will show that the combination of these three conditions, narrowness, length, and difficulty, are all found to the greatest extent about the Straits of Florida and the Windward Passage; while the position of Jamaica, and of its dockyard Kingston, with reference to the Windward and Yucatan Passages, to the rear though somewhat on the right flank of Cuba, regarded as facing the North Atlantic, admirably meets the requirements of a position guarding two defiles; being in the rear, with facility for moving the whole force in either direction. The narrowness attributed to these passages is not in comparison with any particular one of those between two islands of the eastern group, the Lesser Antilles, which often are individually narrower. The contrast is with the entire sweep from Haïti to Trinidad, which is traversable at so many points as to be practically a continuous stretch of water.

The command of Jamaica is further helped on the side of the Yucatan Passage, where it is otherwise weakest, by the way in which the shoals and cays of the Honduras Bank force passing ships to the eastward, bringing them more within range of Jamaica cruisers. Altogether, Jamaica is favorably placed for watching the approaches to the Isthmus by the Yucatan and the Windward Passages. In consequence, by situation, it guards against invasion from the Atlantic a frontier line of over nine hundred miles, from Cape Catoche to the middle of Haïti. In this

line there are only two breaks practicable for shipping, — the Yucatan Passage and the Windward Passage. Of the next defile to the eastward, the Mona Passage, it need only be said for the present that it is at equal distance, five hundred miles, from Jamaica and from the other British station in the island of Santa Lucia.

The Bahama bank and islands, extending from near the coast of Florida, along the northern shores of Cuba and Haïti, nearly to the longitude of the eastern end of Haïti, will have a strong influence upon the approaches to the western passages, and must be included in the general field for study. Except the Bahamas, there seems to be no reason for pushing the northern limits of the field to be examined farther to seaward than the outer shores of Puerto Rico; nor on the east farther than the smaller islands, down to and including Barbados and Trinidad. Inside of this line and of Florida, nothing must be excluded from consideration, but all points presenting possible advantages must receive such degree of study as will exhaust the question of their relative usefulness; keeping in mind the general principles of naval strategy already succinctly laid down.

There is, however, one large elimination which may be made at once. The coastline of the Gulf of Mexico, from the mouths of the Mississippi westward as far as Cape Catoche, offers no port the inherent advantages of which give it strategic value as regards the Caribbean region; while the position of this sweep of coast is farther removed from the center of military and commercial interest than many other ports which have both strength and resources. For our purposes, therefore, all the Gulf of Mexico west of a line drawn from the mouths of the Mississippi to Cape Catoche may be consigned to isolation. This isolation is more emphatic from the fact that Mexico is not a great power, and consequently will not exert any great weight

upon the military balances of the Caribbean; and yet has attained to a degree of political stability which gives hope that she will not bring upon herself foreign meddling.[1] There is, further, no probability that the trade of her east coast will receive an increase by becoming the medium to supply the wants of the Pacific slope. This means that the commercial importance of the eastern seaboard of Mexico depends only upon its own natural development. It is not favored as a center of distribution; whereas by the opening of the Panama Canal the whole west coast of Mexico will receive a commercial impetus, similar to that which is now expected by the Pacific coasts of Canada and the United States.

To the field, reduced by this single omission, it is not possible to assign a resemblance to any regular geometrical figure. With the exception of the one imaginary line of demarcation, from the mouth of the Mississippi to Cape Catoche, the outline is irregular in the extreme. Still, upon close examination it will be found practicable to lay down certain arbitrary lines which will serve to give clearness to our conception of the field as a whole; to which can be conveniently referred the various points within it; and between which will be found, with very slight exceptions, all the chief strategic points.[2]

A line drawn from the South Pass of the Mississippi to Colon, passes through the middle of the Yucatan Passage. It leaves on the outside Cape Catoche and Mugeres Island, the Gulfs of Honduras and Mosquito, the Belize and the Chiriqui Lagoon; but, with the possible exception of Belize, not so far off as to be of inconvenient reference.

Second: a line drawn from Pensacola through Sombrero Light at the entrance of the Anegada Passage, leaves out-

[1] Recent events have somewhat shaken this hope; but not extinguished it.

[2] See Map at end of Chapter XII, facing page 382.

side it no strategic feature of importance. It includes Tampa Bay and all the Bahamas.

Third: a line drawn from Colon through the channel separating the islands of Santa Lucia and Martinique — two naval stations belonging respectively to Great Britain and France — leaves outside it no point of probable great strategic importance, unless it be the island of Barbados, which is no longer of the account it once was. This line passes through Cartagena, the Gulf of Venezuela, and the Dutch island of Curaçao. The British islands south of Santa Lucia may be safely looked upon as having less than secondary strategic value.

The three lines thus laid down may be considered as forming a triangle, and this word will be used, when convenient.

One of the first things to do is to establish certain distances in our minds:

From the South Pass to Colon is 1,500 miles.

From Pensacola to the Anegada Passage is 1,700 miles in a straight line (Mercator).

From Colon to Port Royal, Martinique, is 1,300 miles.

From Pensacola to South Pass is 150 miles.

The angle at C is a little more than 90°.

The points of chief strategic importance, having reference to their position, strength, and resources, will now be named. It is not intended to discuss, just here, the reasons for the choice, nor to detail the advantages of any port. These points are: The mouth of the Mississippi, Pensacola, Key West, Havana, Cienfuegos, Santiago de Cuba, Kingston, Chiriqui Lagoon, Colon; the islands Santa Lucia, Martinique and Guadeloupe; Samana Bay, Tampa.

To these may be added, though of inferior importance, Mugeres Island, on the west side of Yucatan Passage; and either St. Thomas, Virgen Gorda or Culebra, islands on the Anegada Passage. Only one of these last should be

put down; because, whatever the advantages of the Passage, it is so easy to make use of another that a position upon it can always be avoided, as far as its control is concerned.

The selection of these as the most important does not imply that there are no others, or that a thorough appreciation of any one of them does not require a study of all its surroundings; of the points from which it can be attacked and from which its influence may be lessened. They are named now simply as the centers of little fields of strategic influence, each of which has its own bearing upon the larger field under examination. Thus Santa Lucia will stand for the whole group of islands south and east of it — Barbados, Grenada, etc.; Key West will include Tortugas and Tampa Bay; Havana, Matanzas and the harbors to the westward; Santiago includes Guantanamo; while Colon, the representative port of the isthmus, embraces the Chiriqui Lagoon and Cartagena on either side.

Since these words were written, the war with Spain has left the United States in political possession of Culebra, and in useful tenure of Guantanamo in Cuba. The strategic effect of these acquirements, as regards situation, is to advance the American base line, if the United States so desires, from the Gulf Coast to this northern perimeter of the Caribbean. It enables the United States, by proper development, to substitute Guantanamo and Culebra for New Orleans and Pensacola, as stations equipped for war. By "equipped" is meant adequately fortified and garrisoned, stored with coal and all other resources, and above all with docking facilities. Abundant coal and adequate docking are the two chief demands of a fleet during hostilities. The great increase of size in battleships within the last decade imposes more than ever among the resources of a naval port depth of entrance, and as much as possible easiness of handling, so far as currents and hydrographic

obstacles are concerned. In these respects, and in situation, both the port of Pensacola and the mouths of the Mississippi have greatly lost value, comparatively, in the last twenty years. Referring to our summary of the elements of strategic value in a sea position, we may say that in situation, and in natural elements of offensive and defensive strength, Guantanamo and Culebra exceed decisively any combination of our Gulf coast ports; that in artificial resources most essential to war they can be made equal to the others, although they remain inferior in natural resources, as compared with positions upon a continental coast line, which can draw without limitation upon the national territory. In short, as to the Caribbean and Isthmus, Guantanamo and Culebra can become to the United States what Gibraltar and Malta are to the interests of Great Britain in the Mediterranean and at Suez; with the advantage to us that they are nearer our home ports than those positions are to Great Britain.

The relation of Guantanamo and Culebra to the general strategic situation of the United States, as here argued, have not received as yet definitive legislative recognition. Discussion therefore will proceed on the lines of twenty years ago, before these places were acquired. Reverting to the list of ports above given, it will be noted, first, that with the exception of Jamaica and Key West, the positions held by powers of the first order of strength are at opposite extremes of the field. The United States holds Pensacola and the Mississippi. Great Britain and France are stationed in the Lesser Antilles; the one at Santa Lucia and other small islands, France at Martinique and Guadeloupe. As regards the strength of these respective positions, upon the general principles of naval strategy already laid down, those in the small islands, three thousand miles away from their mother countries, cannot be compared to those lying on the seaboard of a great state with all its resources be-

hind them. The British and French positions in the Lesser Antilles are, however, between one and two hundred miles nearer the Isthmus than are the points of our Gulf base; and the current is more favorable to them, which increases nearness.

Observe, next, that there are two advanced positions occupied by first-class powers, viz., Jamaica and Key West. Jamaica is nine hundred and thirty miles from Santa Lucia, Key West only four hundred and sixty miles from Pensacola. In this respect, easy support from the base, Key West has the advantage; it has the disadvantage of being a very small island without natural resources. As an advanced post, Jamaica certainly is much superior in itself; and it is only half the distance of Key West from the great center of interest at the Isthmus. From its central position, Jamaica can exert efficient control throughout the Caribbean Sea. Mention has been made already of its excellent situation for guarding the Yucatan and Windward Passages. Under its present tenure, this is rather an element of offensive than defensive power, as those passages are more useful to the United States than they are to Great Britain. Key West, on the contrary, has a position valuable both for the offense and defense, in the control of the Strait of Florida, which must be centered in it.

Here is the proper place to dwell upon that very striking military feature, the Florida peninsula and the channels which separate it from Cuba and the Bahama Banks. The effect of this long, low, and comparatively narrow strip of land upon the maritime interests of the United States can best be realized by imagining it wholly removed; or else turned into an island, by a deep, practicable channel crossing its neck. In the latter case the two entrances of the channel would indeed have to be assured, but shipping would at least not be forced to pass through a long, narrow passage bordered on one side by foreign and possibly hos-

tile nations. In case of war with Great Britain, this channel would be likely to be infested by hostile cruisers close to a home base in the Bahamas; the very best condition for a commerce-destroying warfare. Protection of vessels using this channel would exact a greater effort from the United States than the supposed strait would, or than if the Florida peninsula did not exist. The effect of the peninsula is to thrust the route between the Atlantic and Gulf coasts three hundred miles to the southward, and to make a control of the straits imperative; while the case is made worse by the almost entire absence of useful harbors. There are none on the Atlantic, the most exposed side; and on the Gulf none nearer to Key West than one hundred and seventy-five miles, where we find Tampa Bay, which thereby receives an importance not due its strength, resources, or situation otherwise. There is, indeed, nothing that can be said about the interests of the United States in an Isthmian Canal, as connecting the Atlantic and Pacific coasts, that does not apply with equal force to the Straits of Florida as uniting the Atlantic to the Gulf coast and Mississippi Valley. All this emphasizes the importance of Key West and its dependency, Tortugas, as the only strong military points on this stretch; and their own barrenness of natural strength or resources makes only more important the accumulation of artificial power in this locality.

Key West has then for the United States a double value; first and chiefly because it links together the Atlantic and Gulf systems, protecting what should be regarded and constituted rather an internal than external line of communication. Secondly, it is an advanced post which will never be of the first order of military strength, but which still will be invaluable in any forward step necessary to be taken in order to secure due control in the Gulf and Caribbean, and so of the Isthmus and communications between the Atlantic and Pacific. Though inferior to Jamaica in

every respect save position, it is of more consequence to the United States than that island is to Great Britain.

These prognostications of 1887 were fulfilled in 1898 by Key West becoming the advanced base of American naval operations; besides by position covering Tampa, a principal rendezvous of troops, because reached by railroad. One result of the hostilities with Spain has been to gain the United States a position still further advanced towards the greatest strategic center of the Caribbean; that is, towards the Canal. The acquisition of Culebra and Guantanamo, should they receive proper development, will not deprive Key West of its unique positional value, as being immediately on that important link of our communications, the Florida Straits; but the development of those two positions, by advancing our front of operations, would cover Key West, strengthen it, and enforce its control; or, what amounts to the same thing, would enable it to exert the same control with fewer ships.

This is a suitable place for interjecting a remark, on naval strategy in general, which I have intended to make to you before concluding. My object has been a *general* treatment of the subject, eliciting its principles by illustrations, chiefly historical, although partly by hypothetical cases. As was said at the beginning, all that a lecturer can impart is the *general principles*, drawn out and enforced by illustrations. Now, the best illustrations of strategy are, and necessarily must be, historical; those afforded by grand military operations on a large scale, such as Bonaparte's Egyptian expedition, and that of the Athenians against Syracuse, which, for the age, was on a very large scale. Such bring out in bold relief the principles which are to be enforced, and which are the same in them as in other more contracted spheres.

We are engaged here in making specific application of general principles to one particular scene of possible mari-

time war, — to the Caribbean and Gulf regions; but in passing, and as further illustrative, it may be well to notice analogous details in the Atlantic and Pacific, dependent upon the same principles. Principles apply in all cases; and while they are best deduced and exemplified from historical instances, such as those cited at length, and others mentioned incidentally, they are also susceptible of fruitful illustration through an examination of geographical conditions. For geography underlies strategy; a statement which is itself simply an application of Napoleon's saying, "War is a business of positions." In contrasting the geographical conditions of our three coasts, we reinforce the conclusions as to any one of them by the instances of the others; and at the same time may broaden our own grasp of the general principles by making more acute our perception of each case. Thus:

1. On the Atlantic, the United States possesses two ports fitted for chief maritime bases: Norfolk and New York. To them correspond certain other positions suitable for advanced bases, such as was furnished to Great Britain in the Mediterranean at one period, 1794–1796, by Corsica; at another period 1714–1782, by Minorca; and to-day by Malta. Similar positions, advanced as regards New York, are New London and Narragansett Bay; and for Norfolk, Port Royal and Key West. In addition, New London and Narragansett give a fleet based on them a position always menacing, viz.: on a flank of the enemy's line, supposing that to stretch from Norfolk to New York, the two American ports. New London also, by comparison with Key West, illustrates the advantage in defense, and for resources, which we have seen attaches to a mainland position.

2. On the Gulf, the United States possesses New Orleans and Pensacola. As a base, neither of these is comparable to New York or Norfolk, which is to be regretted the more, because, being by position further with-

drawn from the attack of a European enemy, they are thereby the more secure. This relative immunity is due, not only to their greater remoteness, but to the fact that for such an enemy, appearing before them, the communications, whether through the Florida Strait or the Yucatan Passage, would be much more exposed than if before the Atlantic ports. This exposure arises from the position of Key West and the projection of the Florida peninsula, which thus has for the United States an offensive value, as well as being the element of weakness for our own shipping before noted. To these Gulf ports Key West supplies an advanced base; and the fact that it can avail thus for both the Atlantic and the Gulf doubles its significance and value.

8. In the Pacific at this moment we have San Francisco and Puget Sound as established naval stations; and to them Hawaii serves as an advanced base, which has now received distinct recognition as such, and is beginning to have adequate development. The Panama Canal Zone, when duly fortified as intended, will furnish another advanced base; common to the Atlantic and Pacific, as Key West is to the Atlantic and Gulf.

In this consideration of contrasts, it is also instructive to observe that, if the entrance to Long Island Sound be properly fortified, Long Island, by thrusting the enemy's ships to a distance, plays a part very similar to that of the Florida peninsula which forces them to a dangerous circuit. Long Island thus is not only defensive towards the United States but also offensive towards an enemy.

In a general sense, for the defense of a coast having two or more sea bases, the best disposition of a navy would be to mass the battleships in the one most favorable to their going out for offensive operations; the other coast ports being utilized for operations against the enemy's trade or communications, so as to lead him to divide his forces, and

thus to lay himself open to attack. Unless overwhelmingly superior, he must divide his force or neglect some of his points. On the United States Atlantic Coast, for instance, New York seems very clearly indicated as the point of assembly for the battle fleet, not only because of its vast resources in being so near the industrial activities of the country, but chiefly because, linked up with New London and Narragansett Bay by Long Island Sound, it presents admirable tactical facilities for perplexing an enemy and insuring egress by the fleet. In other cases, as in that presented to the Russians by their possession of Vladivostok and Port Arthur, the point of assembly would be determined upon consideration of all the conditions; but there seems absolutely no reason to contravene the general primary principle that the armored fleet of the weaker belligerent must not be divided.

Let us now revert to the detailed consideration of the Gulf and Caribbean, which is our immediate subject. Having already noted first the bases, and next the advanced posts of first-class states, look now at the line of strategic points — all valuable and some of the highest importance — extending from the inferior one of Mugeres Island, on the west, to St. Thomas on the Anegada Passage.

Of the six points here selected, the two flank ones are considered to be of inferior value. Mugeres Island has excellent position, but no resources; as an anchorage, it is only tolerable and is not susceptible of first-class defense. St. Thomas on the other hand, or any other port on the Anegada Passage, has not a strategic situation that compensates for the smallness of the islands and consequent weakness both in resources and in military strength. While these statements are true, both absolutely and also relatively to the other four points of the line in question, the importance of the Yucatan Passage to the United States might make it worth while to obtain Mugeres Island, and spend upon it

the money necessary to give it all possible strength and resources, if nothing better can be had. The island is distant five hundred miles from the South Pass, six hundred from Jamaica, three hundred and forty-five from Key West, and about three hundred from Havana. It is immediately upon the Yucatan Passage — here one hundred miles wide.

The mention of Mugeres Island is retained, as useful to the consideration of the Gulf and Caribbean problem as a whole; but the acquisition of Guantanamo and Culebra deprives the position of the interest for the United States which it once might have had. The same remark applies to St. Thomas, but in a much less degree. It remains still a desirable position for the United States to obtain. If it had come into her possession, in consequence of the negotiations with Denmark several years ago, there would have been matter for serious consideration whether it or Culebra were the more advantageous as an advanced base, secondary and subservient to Guantanamo. My study of the two, though not exhaustive, inclines me decidedly in favor of St. Thomas, both for situation and for defensive strength based upon topographical conditions. To these is to be added the offensive value that results from greater ease of handling a battle fleet, and greater security of egress owing to hydrographic conditions. As there is no immediate prospect of the United States obtaining St. Thomas, these remarks are useful only as serving to fix professional attention upon the wisdom of acquiring it.

The four inner positions, Havana, Cienfuegos, Santiago de Cuba, and Samana Bay, are distributed along a line of land that is eleven hundred miles long, reckoning from the west end of Cuba to the eastern extremity of Haïti, — from Cape San Antonio to the Mona Passage; being broken in this stretch in only one place, by the Windward Passage, which is little over fifty miles wide between Haïti and

Cuba. Taken as a whole, and including the various approaches that draw together in the Windward Passage, properly so called, the route by the Windward Passage is in places narrower than the Passage itself.

We find here, then, not far from the center of the triangle, one great and almost continuous obstacle over a thousand miles long, not to be crossed by ships except at one passage. If this passage be strongly held by one of two contestants, the other's fleet, if inferior, or a detachment wishing to join the main body on the other side of the obstacles, will be forced to go round by one of the flanks, and this inconvenience will be undergone by all his coal and supply ships.

Passages having a situation like that of the Windward Channel bear an analogy to bridges over a river, except that, unless exceedingly narrow, they must be held by an active force instead of by permanent works; for they cannot be closed by fortifications. If, for instance, the Windward Channel between Cuba and Haïti were two miles wide, with anchorage depth, it could be made impregnable by forts and torpedoes against all ordinary attack or passage. Natural water bridges of such a character are of rare occurrence. The Bosphorus and the Dardanelles are a conspicuous example of such, and in the hands of a strong nation could not be forced. A similar formation is found at the entrance of the Baltic, but it is shorter and therefore weaker; besides which, there is more than one entrance. Artificial channels, or canals, are necessarily limited in width and depth. They are, therefore, susceptible of being strongly held as against the passage of an enemy; but they are also singularly liable to injury by raids or sudden attacks, injuries that may make them for a long time useless to the holder. It is therefore requisite to hold them in great force, if it is wished both to keep their benefits for oneself and to deprive the enemy of them.

When such artificial channels lie wholly within the territory of a strong state, such strong holding may be assumed. For instance, a canal across the neck of the Florida peninsula could be held by the United States against all comers; and the strategic advantage to our own fleet of being able to concentrate through it against an enemy having his fleet divided between the Gulf and the Atlantic, and limited for passage to the Straits of Florida, would be very great. An equal enemy would not dare so to divide, but would be obliged to yield one or the other sea. The German Kiel Canal is an actual striking instance of immense strategic significance. It enables the German fleet to pass at will, in mass and secure, from the Baltic to the North Sea, while an enemy divided between the two must make the circuit of the Danish peninsula in order to unite. But when a canal is in a far-away country, the maintenance of force enough to secure the transit implies the existence of a very strong navy to keep up the communication with the mother country. The Suez Canal, and the Central American Canal when made, may rightly be called bridges, joining in the one case the Mediterranean and Eastern Ocean, and in the other the Atlantic and Pacific; but situated as they are, in remote and weak countries, no single state can control either so as both to have the use itself and deny it to an enemy, without the presence on the spot of a large land force, having its communications with the home country secured, on one side at least, by a navy superior to that which the opponent can bring against it. To control the only line of communication between two great oceans, to the exclusion of an enemy, forcing him to a great circuit, like that around the Cape of Good Hope, or through the Straits of Magellan, while you can move on an inside line, is an enormous advantage; but for that very reason to retain it calls for enormous exertion of force.

When the entrance to any given field of war, though

contracted, is yet too wide to admit of being covered by defensive works, either by holding both sides or by a central position, control must depend upon an active force resting upon strong positions near by. In a maritime field this control will be exercised by the navy, which is the active force, resting upon strong seaports. There is an analogy to the Windward Passage in that theater which is treated by the Archduke Charles; namely, the region where the Danube breaks through the mountains of Bohemia. There the Archduke would establish the chief fortress of the base of operations, to which he ties the system of defensive works for controlling the whole theater of war. He admits that there is another road over the mountains to the northward, by which the central portion of the base, at Budweis, can be approached, and which he even recommends as the better line of operations to an invader for special reasons; but he prefers Enns as the site of the chief strong post, because it is the key to both banks of the Danube at the contracted passage spoken of, allowing the holder to pass from one side of that great obstacle to the other at his will; and because it has more far-reaching influence, in that it commands the resources of a greater extent of country and is more favorably situated for acting upon the base line, of which it is one extreme. It possesses, that is, a flanking position, which may be utilized by the garrison, or by the army resting upon it; an advantage similar to that which New London or Narragansett Bay would confer upon an American fleet against an enemy seeking to control the coast from Norfolk to New York.

There are many other entrances into the Caribbean besides the Windward Passage, but there is none other that confers so great a relief from an onerous circuit, and it is also nearer to the Isthmus of Panama than any other. Therefore, the power that controls it by means of an adequate naval fleet

resting upon a strong seaport near by, lies in the rear of any force which may be operating at the Isthmus from beyond the sea, and flanks the lines of communication of that force. To the United States the Windward Channel has an additional value in being the direct route from New York to the Isthmus; while a European power *controlling* it would receive its shipping of all kinds at the point whence it would have the shortest and least exposed, and therefore most easily protected, road to Panama and Central America. If a nation thus controlling the Windward Channel can afford to reach out to Samana Bay at the east end of Haïti and so control also the Mona Passage, without unduly dividing its force or exposing the communications between the advanced detachment and the main body, it will be very well to do so; for the Mona Passage is singularly clear, and, if left unguarded, saves the circuit of Puerto Rico. But it must be noted that the lines of communication thus lengthened are very long; and that on the north side of Haïti and Santo Domingo there are many ports which flank them, and, so far as situation goes, might be used by an enemy's cruisers to annoy supply ships, etc. Under their present political tenure, however, such use of Haïtian ports would be simply an incident to the general question of preponderant sea power. The ports are not fortified, and will afford to a belligerent neither local bases nor resources.

The best naval position for controlling the Windward Channel is undoubtedly at the east end of the island of Cuba; because it is near the narrowest part of the Channel and because Cuba is so large an island that it may hope by its resources to support powerfully the defense and also the maintenance of a naval station. Of possible points for such a port in that region, Santiago de Cuba is the best; but it is superseded in American consideration by Guantanamo, also an excellent position and harbor. The Bay of

Nipe, in the same longitude, on the north side of the island, has also excellent qualities as a harbor, but it has not been settled as Santiago has. Santiago and Guantanamo are nearer the Isthmus, and have a special recommendation in the way in which they lie over against Jamaica, and are a check upon Kingston in that island, so far as position goes.

The two points, Kingston and Santiago,[1] by their situation share the control of the Windward Passage. It may be noted, however, that while Santiago through its nearness is best fitted to dispute the passage of an enemy, the position of Jamaica will take away from Cuba all use of the Passage as a through route to the Isthmus by unarmed ships, or by inferior forces. Ships from Europe bound for the south side of Cuba would be under the protection of Santiago, as would coasters also. In a supposed case of war between Great Britain and a country possessing Cuba, on terms of equal forces, Cuba would block the channel to her enemy and keep in her hands an interior line of communications; but she could not send her merchant or supply ships to the Isthmus that way, except under strong convoy, because Jamaica flanks the route. On the other hand, Bermuda and Jamaica, two principal British naval stations, could communicate only by the Mona Passage, — a road that is three hundred miles longer than by the Windward Passage — or by one yet farther to the eastward; while if Puerto Rico were held in force by the enemy, as the supposition of equal forces implies, all lines of communication with Jamaica, and especially from Halifax and Bermuda, would be seriously threatened. As between Great Britain with Jamaica, and a state holding Cuba and Puerto Rico, the advantage of position, therefore, is with the holder of Santiago.

[1] It will be remembered that in the conception of this discussion Guantanamo as a position is included with Santiago.

Since these lectures were first written, this positional combination of Santiago and Puerto Rico, then in the hands of Spain, has been transferred to the United States by the acquisition of Guantanamo and Puerto Rico. The frequent mention of communications may seem pedantic; but if anyone will seriously meditate for half an hour upon the anxious condition of a great fleet at Jamaica, with an equal opponent in Cuba, and its colliers threatened as in the supposed case, while the enemy has communication through Cuba with both the Atlantic and Gulf coasts of the United States, endangered only by cruisers having no near supports, he must conclude that the word "communications" has a meaning in modern naval war.

Let us now consider the advantage to the United States of controlling the Windward Passage, not only under present conditions, but with a view to their possible modification in the future. We have already noted the effect exercised by the Florida peninsula upon the communications between the Atlantic and the Gulf, and the consequent necessity for control of the straits of Florida. Let it now be observed that the island of Cuba blocks up the mouth of the Gulf of Mexico, leaving on either hand entrances of nearly equal width, the Florida Straits and the Yucatan Passage; and that Havana, over against Key West, but with superior natural strength, disputes control. From the Gulf, Cuba projects to the eastward five hundred miles, from Havana to Cape Maysi, reproducing thus the phenomenon of the peninsula of Florida, though somewhat longer and somewhat narrower; separating for that distance the Atlantic from the Caribbean, just as Florida does the Atlantic from the Gulf, and at the same time, by its central position, localized in Havana, standing guard over the entrances to the Gulf.

In a military point of view, Cuba and Haïti are prolongations of Florida, and the Windward and Mona Passages

successively give rise to the same considerations as the Straits of Florida. The cases are as nearly alike as resemblances often are. But on the farther side of the Windward Channel a political condition is encountered that affects the military problem. Whereas in Cuba there exists a state of things which gives assurance of an organized, civilized body politic, confirmed now by the political relations of the island to the United States, in Haïti the conditions of society and of politics prevent the expectation of any solid military or naval power arising therein, while the Monroe Doctrine forbids any foreign country acquiring naval stations there, except at the cost of collision with the United States. When at war with the United States, however, such positions might be occupied temporarily.

A military seaport so established in a country inhabited by an undeveloped community, semi-civilized politically, will be open to the same criticism for weakness as one on a very small island; it will not have the backing and resources of a rich and prosperous region, and so it must be supported from home, by the sea.

While, therefore, in the Windward Channel we find again the Straits of Florida, with its Key West in Santiago de Cuba, — or in Guantanamo, — we look in vain for its Havana on the opposite shore, in Haïti. The Havana of the Windward Channel is in Jamaica, at Kingston. The outlook from Cape San Antonio is the same; Mugeres Island has little if any value to the owner of Havana, though he would not be willing to see another power take possession.

The west end of Cuba, then, by its positional advantages has command of both passages into the Gulf of Mexico, and so of the whole entrance. This command has its center in Havana, which thus becomes the key to the Gulf, though susceptible of challenge by Key West. The prolongation of Cuba extends this power of Havana to the

eastward, dividing the Atlantic from the Caribbean through its entire length, and, so far as position goes, confers control up to the Windward Channel. In strong hands, this power, by a fleet resting on Santiago, can be stretched across the intervening water to Haïti, debarring the enemy from that channel and, by the inert interposition of Haïti, forcing him for communication as far to the eastward as the Mona Passage. In other words, the possession of Cuba confers the position to control, on the one side, the Gulf of Mexico, and on the other the waters of Haïti, with the adjoining straits and channels.

To illustrate this controlling position of Cuba, let us suppose the two most suitable harbors on either side of the entrance to the Gulf — Key West and Mugeres Island — to be in the hands of one power, while Havana belongs to an enemy, and that the forces on both sides are equal. The nation possessing the two points must either divide its ships between the two, leaving each fragment inferior to the enemy at Havana; or else, keeping its fleet together, must so far abandon control of the one passage or the other. In short, Havana has the usual advantage of central position, viz.; ability to move in either direction with massed force, and consequent control in either direction; whereas the supposed opponent has to choose between one side or the other of Havana, unless willing to take the risk of dividing his force.

As regards this question of division, wireless telegraphy undoubtedly has facilitated the communication of intelligence between separated bodies of the same fleet, and so far facilitates their junction; but though it may thus affect a desired junction, it does not effect it. It does not blind the enemy's scouts, who likewise can use wireless; and who also, if unable to read a cipher message, will by wireless hearing pick up the fact that something is in the air, and will notify their main fleet, which will seek a position

to interpose between the two divisions. Wireless has perhaps increased the necessity for adequate scouting, that is, for the vigilance of which scouting is the expression; for news must be ascertained by the eyes before it can be transmitted. But the principle of not dividing a force so as to be out of sure mutual support remains unshaken, even if modified in application.

The change in political conditions since these lectures were written makes it no longer necessary to consider, as was then done, the effect of Havana, and of Cuba generally, upon the communications of the United States with the Isthmus of Panama in case of war with the holder of Cuba. It was then noted that, in case of such hostilities, communications from the nearest, and therefore natural, base of the United States, from Pensacola and the Mississippi, must pass the Yucatan Passage close under the reach of Havana; just as vessels from the Atlantic coast must pass under that of Santiago, unless content to give up their shortest route, through the Windward Passage. Granting equal military and naval strength on the two sides, Cuba and Puerto Rico, in the hands of one state, as they then were, would make military access to the Isthmus in time of war dependent, for the United States, upon an extreme circuit, at least as wide as through the Anegada Passage; after which the rest of the road to the Isthmus is more or less flanked throughout by the position of the two islands. In short, the possession, or military control, of Cuba and Puerto Rico, or even of Cuba alone, by an enemy of naval force equal to the United States, would be an absolute bar to American influence at the Isthmus.

This is so evident, and the importance of the Isthmus to the world is so great, that nothing more is needed to show that the United States cannot afford to allow herself to be overpassed in predominance of naval strength by any state, except Great Britain; for upon naval predominance, and

not upon mere tenure of positions, will depend effective control of the barrier traced by Cuba and Puerto Rico. The general military and economical conditions of the British Empire, its commercial intercourse with America, its international relations, and the consequent general trend of its naval policy, evident in the changed distribution of the fleet, make the endurance of peace between it and the United States as certain as anything in the future can be; much more certain than with any other of the great maritime states of the world. It would therefore be a mistaken policy for the United States to push Great Britain towards exhaustion by an attempt to rival her in a degree of naval strength of which we have no need; whereas her dependence upon it is vital and cannot by her be neglected.

Should contention for control at the Isthmus arise between the United States and a European state, the possession of Key West, Guantanamo, and Puerto Rico with its appendage Culebra, constitutes a formidable line of control, affording great support and protection to routes from the Atlantic to the Isthmus and Canal Zone, and almost perfect security to those from the Gulf ports. To this may probably be added a benevolent neutrality on the part of Cuba, facilitating the transport of material by land to Guantanamo.

Altogether, while under existing international relations there seems no immediate probability of the predominance of United States' interest in the Isthmus being questioned, or her position in the Caribbean endangered, it is most desirable that military men should note and keep prominently in view, in all its details, the strategic bearing of the long chain of positions, from the Anegada Passage to Yucatan, upon the question of control in the Caribbean and Gulf. They mark the Danube Valley of that region.

The position of Santiago de Cuba, already partially discussed, is as advantageous with reference to the particular

channels near it as is that of Havana. As respects the Windward Passage, and also the passage between Jamaica and Cuba, Santiago has a central position, interposing between any two possible ports that might conceivably be occupied by an opponent; and the Windward Passage is in itself of very high importance. But while equal to Havana in its control of its own field, it is inferior in two respects. First, there are many other passages by which the Caribbean may be entered and the Isthmus approached, whereas there are only two entrances to the Gulf of Mexico, both of which are watched from Havana. The Windward Channel and its stronghold, Santiago, can therefore be avoided; with inconvenience, loss of time, and possible danger, it is true, but still it can be done. Secondly, the commercial interests centering in the Gulf of Mexico are unusually great, greater than those of the Windward Passage, owing chiefly, though not wholly, to the extent and wealth of the Mississippi Valley. The products of this region have no clear outlet to the ocean without passing through the gates over which Havana stands guard.

Still, after all deductions, Santiago (or Guantanamo) as well as Havana must be considered a strategic point of the first importance. Taken together, and upon the supposition that the power holding them is equal in military strength to its enemy, the two have the advantage which naval strategy asserts for ports on large islands, of two lines of intercommunications; they can communicate with each other by land and by sea. The distance between them by land in a straight line is four hundred and ten miles. By sea, going round west of Cuba, through the Yucatan Passage, the distance is seven hundred and twenty miles; by the east of the island and the Old Bahama Channel, six hundred and forty-five miles. These sea distances are too great to dispense with intermediate fortified ports, which need not be of the first strength. Such ports will be wanted, not

only to support cruisers that must patrol the coasts, but for the defense of the coast itself. The narrowness of the island will also expose it to the danger of having its railway system cut by a sudden landing; against which, however, the extensive shoals off both the north and south coasts of Cuba impose a formidable obstacle.

A state wishing to draw the full advantage from the position of Cuba would therefore be obliged to improve the great natural strength, both offensive and defensive, that it possesses, as well as to develop its resources. This done, the island would have, to a high degree, the three elements of strategic worth, position, strength, and resources. To exert full control, both Santiago and Havana should be adequately fortified and made capable of being held in force by both army and navy; and they should be linked together by intermediate ports, fortified toward the sea only, the whole constituting a system of defense for the coast, and of offense for the off-lying sea. The details of such a system would require long and special study, not in place here.

Here, in passing, may suitably be interposed a comment which I have made in other connections, viz.: that the consideration of several ports of a particular district in their relations to one another, and to their common field, has reference to general operations of the nature of a campaign, and therefore is strategic in character; whereas the fortification and development of the particular ports, regarded separately, the local arrangements for enabling a fleet to act from it, or against it, resemble the dispositions of a field of battle and therefore are tactical. This proposition has been developed somewhat at length, when discussing the dispositions of Lord St. Vincent for the blockade of Brest in 1800.[1] There can be cited also appositely a statement

[1] See "Influence of Sea Power upon the French Revolution and Empire." Chapter XI

attributed to a Russian admiral, that it had been the intention of the Russian government to make Vladivostok and Port Arthur the two most important arsenals of the Empire, each having a fleet of corresponding strength dependent upon it. If this meant merely a peace arrangement, it would be administrative only, like the recently announced purpose of the French government to assign part of their Mediterranean fleet to Toulon and part to Bizerta. This disposition might call for no comment; but if meant to obtain in war, it is a strategic disposition, the essence of which is to divide the fleet for action between two ports, instead of providing two ports as bases, properly fortified, each of which could on necessity serve the massed fleet according to the emergencies of the campaign. These conceptions, of massing the fleet or dividing it, of making the fleet serve the ports, or the ports the fleet, are strategic; whereas the dispositions around each port to enable the fleet to make any movements of defense or offense, of egress or ingress, have reference only to the immediate locality, and are therefore tactical. From the traditional Russian policy, and from the conduct of the late war, we may infer the purpose of division, based on the theory known as the Fortress Fleet.

On the Cuban coast line there are so great a number of harbors that there can be no doubt of finding such as shall be in all ways fit for intermediate harbors, of refuge or for small cruisers. On the south side there is the excellent harbor of Cienfuegos, distant by water from Santiago three hundred and thirty-five miles and from Havana four hundred and fifty miles, although by land it is more than twice as far from the former as from the capital. Taken with Santiago, Cienfuegos gives Cuba the two desirable points of a base on the same coast line, looking to operations to the southward. Cienfuegos has in itself the elements of a first-class military port, but its situation

is much inferior to that of the other two. It does not immediately command, as they do, any narrow way or maritime cross-roads; and although to a certain extent it flanks the routes passing through the Yucatan Passage or to the southward of Cuba, it is too far distant to exert an effect proportionate to its intrinsic strength. In other words, it is by its situation lacking in offensive power. On the other hand, it is about midway between Cape San Antonio and Santiago, and so seems the natural center of operations for cruisers operating either towards Jamaica or the Yucatan Passage, from which points it is nearly equidistant. For a long distance on either side, too, Cienfuegos is flanked by extensive systems of reefs and shoal water, which at once suggest the home and refuge of light vessels of all kinds, especially torpedo vessels and submarines; which could not there be followed by heavy ships, or by strangers without local knowledge. In pursuance of the remarks just made, these natural features may be classed among the tactical facilities of the port, rather than among its strategic relations. Based on Cienfuegos, such a flotilla would be a perpetual menace to enemies near the coast.

It is interesting and instructive to note that under very different natural conditions the same use and function is attributed to Heligoland in the German scheme of coast defense. Instead of a network of shoals, Heligoland is a steep-to island, with vertical cliffs one hundred to one hundred and seventy-five feet high, with some outlying reefs which give a roadstead, but not a harbor. It has been fortified with very heavy guns and mortar batteries, and made a permanent base for torpedo boats and submarines. Being equidistant, about fifty miles, from the mouths of the three great German rivers which enter the North Sea, the Ems, the Weser, and the Elbe, the Germans believe that the acquisition of Heligoland, which was ceded by Great Britain in 1890, long before German

naval rivalry became urgent, makes the blockade of their coast extremely hazardous. It will be observed that in this conception Heligoland is brought into relation with the whole scheme of coast defense, and of the operations of both the German navy and that of a possible enemy. This is strategic; while arrangements for the defense of the island, — for instance, the defending batteries, — are local, limited, and tactical. Shoals like those which surround Cienfuegos and much other of the coast of Cuba, if navigable by small vessels, need no fortification.

This intricate ground about Cienfuegos extends to the eastward as far as Cape Cruz, where the radius of influence of Santiago is met; and to the westward to within sixty miles of Cape San Antonio, centering round the Isle of Pines. It was this peculiar and extensive ground of difficult navigation, joined to its remoteness, that made the south side of Cuba a favorite resort for pirates in bygone days. With these defensive adjuncts, with its intermediate position and intrinsic value, there seems every reason to rank Cienfuegos high among military ports of the second order; but it appears unlikely that it would be chosen as the base of first-class offensive operations by Cuba itself. Nor does it seem probable that for maritime advantage alone it would offer such inducements to an enemy of Cuba as to necessitate heavy protection against an attempt at mere naval occupation. Its nearness by land to Havana, and to the network of railroad found in the narrow neck of the island, might make the position one favorable for the landing of an expedition aiming at conquest, though the railway facilities should promote also the concentration of a Cuban army. In 1898, Cienfuegos was naturally supposed to be Cervera's destination, as favorable both to receiving and to introducing supplies, and to ease of coöperation with the main Spanish army; and, unless I am mistaken, the idea was at least entertained in the

counsels of the United States of landing there for attack on Havana.

On the north side of Cuba there is a group of fine harbors centering about Nipe Bay, which is apparently the best. There are also good harbors to the westward of Havana; and on the south side, near Santiago, there is Guantanamo Bay. Of these we will venture only one remark, of general application: that when there are several ports close together they must be comprised in the same scheme of defense, as in the case of New York, New London, Narragansett Bay, and the entrance of Long Island Sound; but it is neither necessary nor desirable to treat them all alike. Guantanamo Bay, for instance, had no value to the possessor of Santiago; but as the enemy might use it, as the British once did, in 1740, as a base of operations against Santiago, care needed to be taken to prevent a lodgment. This is true of Havana and its neighborhood, and so on.

The narrowness of one part of the old Bahama Channel, on the north side of Cuba, will suggest the possibility of controlling that stretch, if there is any likelihood that the enemy should wish to use it. Such control would force him to pass around the Bahama Banks, or else to go by the south side of the island. For example, in the passage of the United States transports through that narrow stretch, in 1898, a strong torpedo force occupying those intricate shoals which border the Cuban side of the Bahama Channel would have been a very serious menace, and possible deterrent. In the case of numerous transports, there is always a fair presumption that a panic can be easily started; and Admiral Chadwick, then Sampson's Chief of Staff, has testified to the excessive nervousness and bad conduct of many of the transport captains when arrived off their destination. A panic once started under such conditions takes care of itself.

In the successful attack upon Havana by the British fleet and army, in 1762, the admiral took the expedition through this channel, not wishing to lose time by going round to the southward, because the season was late. In doing so, he had only hydrographic difficulties to meet, the enemy offering no opposition; but, with a large fleet of sailing transports, to have accomplished this without loss was justly considered a very creditable feat. The whole system of the Bahama Banks with their intricacies, lying so near Cuba, impassable to heavy ships but sheltering light vessels, must have strategic value, though just what that value will be cannot be said offhand. They correspond precisely to difficult country ashore, impracticable to certain kinds of troops, and therefore useful to other kinds, behind or upon which one of the opponents may shelter his front or his flanks. With the mention of this long line of reefs and shoals on the Cuban side of the Bahama Channel, and of the Colorado Reefs off the west end of the island, the principal hydrographic features will have been named. Such districts favor a kind of guerrilla sea warfare. Their strategic value resembles that of Chandeleur and Mississippi Sounds on the United States Gulf Coast, or that of the sea-island passages of the southern Atlantic States.

This ends the discussion of the elements of strength or weakness in the island of Cuba itself, as distinguished from its strategic relations to other parts of the Caribbean Sea and Gulf of Mexico.

CHAPTER XII

THE GULF OF MEXICO AND THE CARIBBEAN SEA
(Concluded)

WE have so far discussed the strength and weakness of the Island of Cuba intrinsically; in itself alone. There remains now to consider the possible extension of its influence to a distance, over the surrounding waters, by means of naval power. Upon this will follow a comparison, at some length, between the different principal centers of operations pertaining to the Caribbean proper. These principal centers, or bases, it may be said, are three in number, namely, the Eastern Antilles, either collectively or individually, Cuba, and Jamaica.

It has been said before that if the owner of Cuba felt strong enough to reach over and control the Mona Passage, by occupying Samana Bay or Puerto Rico, it would be well to do so. Granting adequate naval force, the occupation of Cuba alone gives command of the Yucatan and Windward Passages, and thereby, through the inert barrier of Haïti, extends control over all the northern entrances to the Caribbean as far as the Mona Passage; but it does not include this. To control the Mona Passage also, it is necessary to occupy an advanced post near it. This post should be strong enough to shelter the cruisers in the Passage, in case of the appearance of a superior force, and should contain a sufficient coal deposit for their use. The control here purposed is simply that of closing the passage, not by the main fleet but by cruisers, which would stop both the enemy's communications and his commerce, and

would insure to one's own shipping the safe use of the route. It does not appear worth while to push battleships so far from the Cuban base, unless the enemy's fleet should appear in the neighborhood of the Mona Passage; for blocking the Mona Passage only throws shipping upon the Anegada, two hundred and fifty miles further east, which distance also may be shortened by using the practicable channels between Puerto Rico and St. Thomas. There is some gain, it is true, in thus imposing a longer circuit upon vessels coming from Bermuda or the Atlantic Coast; but it is not great enough to warrant dividing the battle fleet, nor sending it in a body so far away from Cuba and the more important central position. The distance from the Windward to the Mona Passage being three hundred and fifty miles, an enemy's fleet might slip through the former while thus uncovered. A squadron of cruisers advanced to the Mona Passage would resemble cavalry which scours a country in front of an army; but a main body so advanced, except for a specific purpose, would sacrifice the central position of Santiago and weaken its effect upon Jamaica and the Yucatan Passage.

The hostilities between the United States and Spain in 1898 afforded an illustration of the effect here noted, arising from the leaving open the Windward Passage, the real central position of the war. Admiral Sampson's fleet bombarded San Juan May 12. If it had been at the Windward Passage, instead of beyond the Mona, word of Cervera's appearance off Martinique would have been received by it the following morning, May 13. The condition thus constituted by the relative positions of the opposing fleets, would have been that Cervera would have to go a thousand miles to Sampson's one hundred to reach Santiago, or twelve hundred to four hundred to reach Cienfuegos. Between opponents equally matched in force and speed, such a situation, for the one which wished to evade

action and reach a Cuban port, was not indeed wholly desperate; but its disadvantage is obvious, as is the advantage of the other fleet in holding a central position.

If, in addition, the so-called Flying Squadron had been with Sampson, or within call, instead of in the eccentric position at Hampton Roads, the American admiral would have had at his command ships enough to send an armored division before Havana, while himself retaining force adequate to meet the enemy on equal terms before either Santiago or Cienfuegos. This disposition, by blocking entrance to Havana, would have allowed the main body to leave the Windward Passage for a position between Cienfuegos and Santiago. There, by a reasonably organized scouting system, it could scarcely fail to receive news of the enemy's course in time to intercept him before whichever of these two ports he sought. Without the Flying Squadron Sampson could not divide; and if at the Windward Passage, as here assumed, could not, in my judgment, take the risk of leaving the Passage, giving the enemy a chance to get through it, and so to Havana. The question would again become one of scouting; but under more difficult circumstances because of the distance of Cienfuegos from the Windward Passage. In the Windward Passage the American fleet would have interposed absolutely against any attempt to approach by the north side of Cuba; while even the Flying Squadron from Hampton Roads could have been off Havana before the enemy, if he had attempted to proceed from Martinique south about, through the Yucatan Channel.

The most plausible argument against thus closing access to Cuban ports is that it would be purchased at the expense of leaving Puerto Rico open. The reply is that the United States had not ships enough to close all ports, and that arrival at San Juan was less detrimental to her, and less advantageous to the Spaniards, than reaching a Cuban port

would be; while a fleet at that anchorage is vastly more exposed to attack. The place being watched of course by American lookouts, the news would be transmitted and the American fleet probably on hand before the Spaniards could coal and get away. From San Juan to the Windward Passage is a bare five hundred miles.

As actually happened, the American fleet was before San Juan, Puerto Rico, when the Spaniards reached Martinique. Under the conditions of communication which then existed, a resolute enemy had a fair chance to get such a start as would have enabled it to reach either of the southern Cuban ports; or else the Windward Passage, which would have given him the lead in a race for Havana.

The question of scouting suggests the great difference in utilizing information which has been caused by wireless. In 1898, a cruiser before San Juan must go four or five hundred miles to the Windward Channel to give her news, and the fleet traverse the same distance back to reach the scene. Now the cruiser does not leave her station for this purpose, and the time consumed in her voyage is saved; which means that the fleet arrives in half the time. Moreover, there is no longer the same necessity for having two lookouts at important centers, one to keep touch while the other carries news. One remains steadily, while at the same time wiring. It is well, however, to bear in mind that occasions may arise where two lookouts would be expedient. This is just one of the things apt to be neglected at a critical instant, unless a part of an officer's habitual thought. In military emergencies it is impossible to have the storehouse of the mind too full of resources against all possible contingencies.

Two points suitable for advanced posts commanding the Mona Passage are Samana Bay and San Juan in Puerto Rico, on the north shore of the island; also in the island Culebra, a dependency of Puerto Rico. A first-class state

holding Cuba with a secure political tenure, having a well-developed railroad system, and a strong army and navy, could, without imprudence, reach out beyond, and occupy either or both of these two points. Under such conditions, these advanced isolated stations would bear to Cuba precisely the same relation that Key West does to the Atlantic and Gulf coasts of the United States; they are advanced posts not beyond the reach of the home country. But without an intermediate position such as Cuba affords, such posts cannot be held securely by the United States, unless having a navy overpoweringly stronger than its enemy. It is true, and has always been insisted upon in these lectures, that on a maritime theater the navy is the all-important factor; but in these days a navy no more than an army can stretch its lines of communication too far from a strong and extensive base. Its communications must be assured, either by overwhelming control of the sea, making it as it were its own territory; or else, by a well-knit line of posts properly spaced from the home country.

When these lectures were first written, the United States held Key West and Atlantic ports. In my judgment, if dependent upon these alone, it could not safely have attempted to occupy Samana; but the case would be different if holding Havana, Santiago, etc. Since then the United States has acquired Puerto Rico and the adjacent small islands; notably, Culebra. This has given a precision to thought about advanced stations in the Caribbean Sea, which was not possible in the years preceding 1898; and the further possession of Guantanamo has removed the stricture then passed as to the unbroken distance from the United States, and absence of intermediate support, affecting the tenure of positions such as Samana Bay, St. Thomas, or San Juan in Puerto Rico. If in condition to contest control of the sea with a strong navy, the United States now has positions properly spaced to support her naval

operations. It remains only to assure those positions by adding to the quality of position, or situation, which they already have, the two other elements of strategic power, namely, defensive strength, and the necessary resources, of stores, and provision for repairs and docking.

Herein — that is, in the present possession of a continuous line of posts — lies the permanent advantage of the United States, in the West Indies, as compared to European states, which must always have the long exposed transatlantic stretch to cover before reaching the nearest of their Caribbean positions. It may indeed be wise, as an act of naval strategy in time of peace, to secure remote points such as these, or as the British Hong Kong or the German Kiao Chau, on distant theaters of probable war, intending to fill up gaps as opportunity offers; but to European countries, as to the United States in the Caribbean before 1898, such long lines of communication mean either a very great risk of losing the positions, or else a navy decisively preponderant, having regard to all their political international complications. The present disposition of the British navy tells us how British European relations, and those between the United States and Great Britain, have affected their concern for Halifax, Bermuda, and the West Indies; and history has shown what a strain Gibraltar even has been at times upon Great Britain. Port Arthur recently has repeated the same story for Russia; and we know what the Philippines are to us, having in view all possibilities concerning Europe and the Far East.

Of the two points named near the Mona Passage, Samana Bay is by far the better harbor, — it is an exceptionally fine one; but as has before been said of all the ports of this island, it must depend upon its own strength and upon support by sea only. The political and social conditions of the island give no hope of aid from the surrounding

country; and it has no resources. Under the changed conditions since 1898, the true military policy of the United States is to give no excuse for occupying this position to another state, by herself taking, or acquiring, possession for military purposes. Malta became English only through the French first seizing; and the present tenure of Port Arthur by the Japanese results directly from the previous acquisition by Russia.

The influence of Cuba as it has been developed in this discussion, consists, (1) in the command which its position exercises over the Gulf of Mexico and the Windward Channel, (2) in its own intrinsic strength, due to its size and excellent harbors, (3) to its great potential resources, which are enlarged by its nearness to the United States, and (4) in its power to reach effectively to the Mona Passage and to Puerto Rico. This strong combination of position, strength, and resources constitutes Cuba undoubtedly the most important single feature in the whole maritime field under consideration. It will be remembered that a very great factor in this control of Cuba is the nothingness of Haïti, resulting from its political and social condition, yet an inert obstacle. There being no promise of any solid national organization arising shortly within this island, Cuba, or any great state vitally interested in Cuba, would naturally insist upon the neutrality of Haïti, and object at once to any of its harbors being conceded to a foreign Power; under conditions, for instance, analogous to those by which the United States now holds Guantanamo. The present possession of Puerto Rico by the United States, would make doubly intolerable the institution of any foreign naval base in Haïti, intervening between Guantanamo and Puerto Rico.

Is, then, Cuba — using the name to represent the whole possible sweep of the influence of the island, from the Gulf of Mexico to Puerto Rico — the key to this theater of mari-

time interest known as the Gulf of Mexico and Caribbean Sea? On the supposition of naval equality between enemies, we have seen how far the influence of Cuba extends; is that influence so great that, if duly exerted, it will give control of the whole, or of the greater part of these seas, including the Isthmus?

As to the Gulf of Mexico there will be but one answer, and that immediate. Granting equal strength, and as long as such equality lasts, if Cuba be held by an enemy the products of the Mississippi Valley must find their way to the Atlantic Ocean overland. Cuba is as surely the key to the Gulf of Mexico as Gibraltar is to the Mediterranean.

As regards the Caribbean, the answer is less obvious and requires careful consideration.

The control so far conceded to Cuba constitutes at least a base of operations for controlling the whole sea. As has before been said of the defile of the Danube, and of Egypt, geographical keys to a given region get their importance, not from their inert strength or position merely, but from being points whence military force may so exert itself as to be certainly superior to an equal force not having the same advantage of position. What, then, are the objects, or points, to be controlled in the Caribbean Sea? What other bases than Cuba are there, upon which such control may rest? How do these other bases compare with Cuba in efficiency for the objects in view?

In answering this last question we must consider the three elements that condition all strategic points, namely, position, strength, and resources.

The objects to be controlled in the Caribbean Sea are threefold:

1st. The entrance into the sea by the various passages.

2d. The chief commercial centers, points of destination, within the Caribbean, of which the most conspicuous is the Isthmus, centering now at Colon.

3d. The communicating lines between the entrances and the points of destination.

1. From the Anegada Passage to the southward through the eastern Antilles, there are so many entrances that it is impossible in that line to prevent access to the Caribbean by holding a geographical position which controls any one or two of them. A greatly superior navy undoubtedly could be so disposed as to control effectively all or most of these channels; but this argument proceeds expressly upon the supposition of equal forces. The conceded influence of Cuba, on the other hand, while not reaching to any one of the Lesser Antilles, dominates the Windward and Mona Passages, which are much the most advantageous to shipping from all the Atlantic ports of North America, including therein both those of the United States and the naval stations of Great Britain in Bermuda and Halifax. Over the Yucatan Passage, which is the natural, and indeed the only direct route from the valley of the Mississippi to the Isthmus, the influence of Cuba is even more incontestable. As regards entrance, therefore, Cuba has control to a unique degree.

2. The chief objectives of commerce within the Caribbean are close around the Isthmus of Panama. If we include with the Isthmus the trade of the Magdalena valley, we need probably consider no other. There is, of course, more or less trade along the whole seacoast, from Mugeres Island to the Gulf of Paria; but it is diffused, and there is no immediate promise of such demand in the back countries as will create new and important centers of trade. The mouth of the Orinoco is without the Caribbean. We may, then, without serious error consider the Isthmus of Panama as the one great center of commercial interest; and that is not only the greatest in the Caribbean but promises soon to be also one of the first in the world.

Besides the commercial centers, there are also important

military objectives *within* the Caribbean Sea. Of these the three most important are Jamaica, the Chiriqui Lagoon, and Colon; the last being a commercial as well as a strategic point. Besides these chief points there are several others of second or third rate value. The Dutch island of Curaçao has a fine harbor and is about midway between the Isthmus and the Lesser Antilles; its position is less than a hundred miles to one side of the steamer routes between the Isthmus and the eastern islands, and therefore flanks their communications. Its cession to any of the great Powers therefore would probably be opposed by others. The city of Cartagena, in the United States of Colombia, has the best harbor on the Spanish Main. It is but three hundred miles from Colon and but one hundred from the steamer tracks, which here converge from every entrance to the Caribbean; its position and probable resources are superior to those of Curaçao. Cartagena, like Curaçao, thus flanks the routes to the Isthmus from the Anegada Passage southward; both are nearer Colon than Guantanamo is, although the advantage of Curaçao over Guantanamo in this respect is very slight.

On the Yucatan Peninsula, the British possession, Belize, has advantages as an anchorage and coaling station, and much natural defensive strength owing to the difficulty of approach without pilots; but any offensive strength could be directed only against the Gulf of Mexico and the one trade route to the Isthmus through the Yucatan Passage. Jamaica being almost equally well situated for both these purposes, it seems unlikely that Belize can serve as a first-class naval station; the more so because at present it has practically no white population and no naval resources. A battle fleet basing itself on Jamaica would probably throw out swift cruisers and lookout ships along the line between the island and Belize; and those at the far end might depend upon the latter for coal, and for certain supplies.

Again, if such battle fleet should, for any reason, advance toward the Yucatan Passage or into the Gulf of Mexico, it would, while holding such position, cover Belize; and, being nearer the latter, might shift its coal base there for the time. Except these two cases, and the improbable and wholly secondary case of extensive operations against Central America or Yucatan, Belize cannot have great military value for the power that holds Jamaica.

It may be said also of the Caribbean coasts of Honduras and Nicaragua that there is no point upon them having strategic value to a state holding either Cuba or Jamaica. They have generally indifferent harbors, possessing neither military strength nor resources. The same, with slight modification, is true of the small off-lying islands in the Gulf of Honduras and to the southward. To a nation controlling the sea, that is, having a very decided preponderance on it, they might be utilized as temporary coaling stations; but they are scarcely worth the cost of fortifying, and only the constant presence of armed shipping could preserve them from raids. Now, the presence of armed shipping, thus disseminated in small ports, implies superiority enough to spare large detachments without undue risk to the main body, which is not the case where there is equality of naval force, as assumed for this discussion.

Of course, complete treatment of any military field involves the hypothesis of varying strengths as well as equal; but, in truth, military problems contain many variables, and it is necessary in any discussion to assign to some of these variables values which for the particular discussion are constant. This discussion, being concerned with positions, assumes forces to be constantly equal.

We may therefore feel justified in saying that on the Central American coast, from Cape Catoche — or Mugeres Island — to the Chiriqui Lagoon, there is at present no

single point of even second-rate strategic importance; while, east of the Isthmus of Panama, the various harbors of the southern Caribbean are represented efficiently by the two best, Cartagena and Curaçao. These two points are less than five hundred miles apart. The second is the less important, because much more distant from the Isthmus. Cartagena, from its situation, its fine harbor, and its capacity for receiving, if not itself supplying, resources, stands little, if at all, below the level of Jamaica and Colon. It would be particularly suitable for an advanced base of operations against the Isthmus. It falls, in fact, within the strategic field of the Isthmus itself and is an important factor in it. The Chiriqui Lagoon has over it the advantage of being nearer to Colon.

The military and commercial objectives within the Caribbean, as distinguished from points on its circumference, reduce themselves thus to two, namely, Jamaica and the Isthmus, giving to the latter term the extension of application which has been done here.

3. The third thing to be controlled in the Caribbean is the transit, or lines of communication between the entrances and these different objectives, within or on the farther side of the Sea. These objectives have been summed up under two heads, Jamaica and the Isthmus; including with the latter Cartagena, and its surrounding country. Belize, if considered at all, will come under the head of Jamaica, as the greater part of the difficulty of transit will be overcome by a vessel that has reached the island. Cartagena, though on the Main, yet falls strategically within the same field as the Isthmus.

Now, with regard to the question of transit. In a great ocean, lines of transit between two points may be very many in number and divergence from one another. The same is true, within limits, of contracted seas like the Mediterranean and the Caribbean. For instance, a ship bound

from the Anegada Passage to the Isthmus might, according to the judgment of her commander as to the dangers, either go direct, or pass for a certain distance along the north side, or along the south side, before striking for her port.

If, however, the points of arrival and departure are known, all routes meet at them, and the assailant, according to his strength and the situation of his ports can take his stand before one or the other, sure that in such a strategic position the enemy's ships must come within his reach. Other things being equal, the point of arrival is better fitted for intercepting communications than the point of departure, because it is harder to get into a blockaded port than out; but to intercept or "check" a military expedition, the point of departure will generally be chosen, — and always, if its destination be unknown.

For example, in the field now under discussion, if an expedition of any size be known to be fitting out at one of the bases, — Cuba, Jamaica, or the Antilles, — the opponent should take post nearby in sufficient force, if able to do so. This applies either to an armed expedition or a large convoy. But if the enemy be already engaged at one objective, for example, at the Isthmus, and depends upon a continual stream of supply ships, concentration of effort would dictate that the opponent should be as near the point of arrival as is prudent. This would be yet more true if the points of departure were many, and of arrival one or few; for instance, if departures were from both the Atlantic and Gulf ports of the United States to the Isthmus, or to some Cuban port. Stationed near the point where the enemy's supplies arrive, an intercepting force is not only best situated to interrupt communications, but has the additional advantage of being on hand ready to strike a blow against his navy should a favorable opportunity offer. A fortified port of its own, should such exist, is of course the best

position; such as Cartagena, Curaçao, or even Jamaica, might be.

The sea wars between England and France on a broader field may be cited as practical examples, and vindicate the usefulness of serious study of historic instances, even though the particular conditions have become obsolete, as warfare under sail has. Great Britain, though greatly preponderant upon the ocean, was exposed in many directions, owing to her interests being scattered in all quarters of the world. The points of arrival, that is, the destinations of the expeditions which France frequently fitted out, were usually unknown, and Great Britain therefore very rightly sought to stop their sailing by heavy fleets stationed before all arsenals. Thus when in 1798 it became manifest that a great expedition was fitting out at Toulon, Nelson was dispatched from Cadiz into the Mediterranean to watch before the port which was evidently the starting point; but, learning that the enemy had got away before his arrival, he made next for the point which from such intelligence as could be gathered seemed most probably that of destination. The relative uncertainty attending the second alternative, however, was apparent in the result; and although the same uncertainty may not arise from the same causes now, it still does exist, and makes a point near that of the enemy's expected departure the proper position, when it can be assumed. Togo was for an appreciable time uncertain as to Rozhestvensky's course, despite the advantages of wireless. One of the most interesting details of Captain Semenoff's "Battle of Tsushima" is the fact of the Russian wireless instruments picking up messages between Japanese scouts, which they could not understand, but from the brevity and regularity of which they inferred that they were merely messages between themselves — keeping touch with one another, as it were, — but did not signify that either had seen the enemy.

The Russians still hoped that they might slip by unseen in the existing haze; for wireless does not see, it only reports.

The difficulty of keeping sailing ships close to a dangerous coast often caused the British efforts to fail, and strained the strength of both ships and officers almost to the breaking point; but in one signal instance the combinations of Napoleon to effect the invasion of England, which he certainly seriously intended, were foiled by the closeness of the Brest blockade. Two or three divisions, intended to meet and combine in the Antilles, got away; but over twenty ships-of-the-line were "detained" in Brest and hopelessly kept from joining the other detachments. If, however, Great Britain, instead of scattered interests, had had but one, as the West Indies, the best course with her superior navy would have been, after providing for home defense, to station one large body in the West Indies at the point best suited to intercept ships bound to the French islands and to protect their own. It was always possible and still is for a dispatch vessel to precede the arrival of an enemy's fleet by some days, because single ships can go faster than fleets. Thus, if a French fleet got away with only one possible destination, a British advice vessel could reach that destination before it. But it was upon the number of their exposed points that Napoleon reckoned for confusing the British; and they, recognizing the facts, sought to parry his initiative by guarding all the points of departure.

It may happen that certain routes must in their course pass within a known distance of an enemy's port, which thereby has the special strategic value before attributed to narrow passages on a route; the port in that case flanks the routes. If England, in the days of Nelson, had had no interests to draw her navy inside the Mediterranean, the French Toulon fleet could have been well watched at

Gibraltar. Jamaica has this particular advantage over all approaches to the Isthmus; and that against the greatest local power in the Caribbean, namely, Cuba. Ships of war from Jamaica, scarcely venturing out of sight, still less out of support of their base, sweep both the approaches to the Isthmus from the greater island. Jamaica flanks both routes, and when to this we add that it is nearer the Spanish Main by one hundred and fifty miles than Guantanamo, and so has three hundred miles less coal to burn on lines covering the sea in its breadth, it is seen that Jamaica has a decided advantage over Cuba in controlling communications from the edge of the sea to the objectives, including the Isthmus. Both islands flank the routes from the eastern Antilles, but Jamaica is the nearer.

Compared to the Lesser Antilles, Jamaica has the advantage of being only half their distance from the chief objective, the Isthmus; it is a very little farther than they from Curaçao. If a great expedition were fitting out in one of the Lesser Antilles, Jamaica, of course, would not be in as good a position for watching it as another island of the same group would be; but as a similar expedition from Jamaica could not be easily checked from the Antilles, the *pros* and *cons* balance in this particular consideration.

In the matter of controlling transit, entrance into the sea being secured, the Lesser Antilles by position control the eastern half, Jamaica the western; but this latter half is decidedly the more important, because it contains the point of arrival at the chief objective. Also, every line of communication from Europe to the Isthmus must pass nearer Jamaica than it necessarily does to any particular one of the eastern islands.

As between Cuba and the Antilles, Jamaica being neutral, the control of Cuba is greater. Jamaica excluded, Cuba, in virtue of her situation, controls defensively her whole line of communication from the Windward Channel to

the Isthmus, and offensively the western half of the sea. The small islands, by position, exert control over only the eastern half of their transit lines to the Isthmus. If, on the other hand, Cuba be neutral, and Jamaica belligerent against the Antilles, Jamaica has over them the same advantage as Cuba. Taking all together, control over transit depending upon situation only, other conditions being equal, is greatest with Jamaica, next with Cuba, least with the Lesser Antilles.

Accepting these conclusions as to control over transit, we now revert to that question to which all other inquiries are subsidiary, namely, Which of the three bases of operations in the Caribbean — one of the Lesser Antilles, Jamaica, or Cuba with its sphere of influence — is most powerful for military control of the principal objective points in the same sea? These principal objectives are Jamaica and the Isthmus; concerning the relative importance of which it may be remarked that, while the Isthmus intrinsically, and to the general interest of the world, is incomparably the more valuable, the situation of Jamaica gives such command over all the approaches to the Isthmus, as to make it in a military sense the predominant factor in the control of the Caribbean. Jamaica is a preëminent instance of central position, conferring the advantage of interior lines, for action in every direction within the field to which it belongs.

Military control depends chiefly upon two things, position and active military strength. As equal military strength has been assumed throughout, it is now necessary only to compare the positions held by other states in the field with that of the occupant of Cuba. This inquiry also is limited to the ability either to act offensively against these objective points, or, on the contrary, to defend them if already held by oneself or an ally; transit having been considered already.

Control by virtue of position, over a point external to

your territory, depends upon nearness in point of time and upon the absence of obstacles capable of delaying or preventing your access to it.

Both Santiago (or Guantanamo) and Cienfuegos are nearer to the Isthmus than is any other one of the first-class strategic points that have been chosen on the *borders* of the Caribbean Sea, including Samana Bay and St. Thomas. They are little more than half the distance of the British Santa Lucia and the French Martinique. The formidable island and military stronghold of Jamaica, *within* the sea, is nearer the Isthmus than Guantanamo is, by one hundred and fifty miles, and than Cienfuegos by yet more.

Taking into consideration situation only, Jamaica is admirably placed for the control of the Caribbean. It is equidistant from Colon, from the Yucatan Passage, and from the Mona Passage. It shares with Guantanamo and Santiago control of the Windward Passage, and of that along the south coast of Cuba; while, with but a slight stretching out of its arm, it reaches the routes from the Gulf of Mexico to the Isthmus. Above all, as towards Cuba, it so blocks the road to the Isthmus that any attempt directed upon the Isthmus from Cuba must first have to account with the military and naval forces of Jamaica.

There are, however, certain deductions to be made from the strength of Jamaica that do not apply as forcibly to Cuba. Leaving to one side the great and widely scattered colonial system of Great Britain, which always throws that empire on the defensive and invites division of the fleet, owing to the large number of points open to attack, and confining our attention strictly to the field before us, it will be observed that in a scheme of British operations Jamaica is essentially, as has been said before, an advanced post; singularly well situated, it is true, but still with long and difficult communications. Its distance from Antigua,

a possible intermediate base of supplies, is over nine hundred miles; from Santa Lucia, the chief British naval station in the Lesser Antilles, over one thousand miles, not less than three days' economical steaming. Great Britain, if at war with a state possessing Cuba, is shut out from the Windward Passage by Guantanamo, and from the Gulf of Mexico by Havana. The Mona Passage, also, though not necessarily closed, will be too dangerous to be relied upon. For these reasons, in order to maintain communications with Jamaica, an intermediate position and depot, like Santa Lucia, will be urgently needed. Supplies coming from Bermuda, Halifax, or England would probably have to be collected first there, or at Antigua, and thence make a more secure, but still exposed, voyage to Kingston. The north coasts of Cuba and Haïti must be looked upon as practically under the control of the Cuban fleet, in consequence of the command which it exercises over the Windward Passage, by virtue of position.

The possessor of Cuba, on the contrary, by his situation has open communication with the Gulf of Mexico, which amounts to saying that he has all the resources of the United States at his disposal, through the Mississippi Valley. Cruisers from Jamaica attempting to intercept that trade would be at a great disadvantage, especially as to coal, compared with their enemy resting upon Havana. Cruisers from Havana, reaching their cruising ground with little or no consumption, can therefore remain longer, and consequently are equivalent to a greater number of ships. On the other hand, cruisers from Santiago could move almost with impunity by the north side of Haïti as far as the Mona Passage, and beyond that without any other risk than that of meeting and fighting vessels of equal size. If they stretch their efforts toward the Anegada Passage, they would feel the same disadvantage, relatively to cruisers from Santa Lucia, that Jamaica cruisers in the Gulf

would undergo as compared with those from Havana; but by inclining their course more to the northward, to or about the point Q (see map), they would there be equidistant from Guantanamo and Santa Lucia, and so on an equality with the latter, while at the same time in a position gravely to endanger supplies from any point in North America. If it be replied that Bermuda can take care of these cruisers at Q, the answer is plain: on the supposition of equal forces, it can do so only by diminishing the force at Santa Lucia. In short, when compared with Jamaica, in respect of strategic relations to Bermuda, Halifax, and Santa Lucia, Cuba enjoys the immense advantage of a central position, and of interior lines of communication, with consequent concentration of force and effort.

It is not easy to see how, in the face of these difficulties, Great Britain, in the supposed case of equal force in this theater of war, could avoid dividing her fleet sufficiently to put Jamaica at a disadvantage as to Cuba. In truth, Cuba here enjoys not only the other advantages of situation already pointed out, but also that of being central as regards the enemy's positions; and what is, perhaps, even more important, she possesses secure interior land lines of supply and coal between the points of her base, while covering the sea lines in her rear, in the Gulf of Mexico. For Guantanamo and Santiago have communication by rail with Havana, while the island itself covers the lines from Havana to the Gulf coast of the United States; whereas Jamaica depends wholly upon the sea, by lines of communication not nearly as well sheltered.

Contrasted with Cuba, Jamaica is seen to be, as has been more than once said, a strong advanced post, thrust well forward into the face of an enemy to which it is much inferior in size and resources, and therefore dependent for existence upon its power of holding out, despite uncertain and possibly suspended communication. Its case resembles

that of Minorca, Malta, Gibraltar, the endurance of which, when cut off from the sea, has always been measurable. The question here before us, however, is not that of mere holding out on the defensive, which would be paralysis. If Cuba can reduce Jamaica to a passive defensive, Jamaica disappears as a factor in the control of the Caribbean and Isthmus — no obstacle then stands in the way of Cuba using her nearness to Panama. If Cuba can bring about a scarcity of coal at Kingston she achieves a strategic advantage; if a coal famine, the enemy's battle fleet must retire, probably to the Lesser Antilles.

The case of Jamaica, contrasted with Cuba, covers that of all strategic points on the borders of the Caribbean Sea, east, west, north, or south. Almost on the border itself, although within it, Jamaica has in nearness, in situation, in size, and in resources, a decisive advantage over any of the ports of Haïti or of the smaller islands. If Jamaica is inferior to Cuba, then is each of the other points on the circumference, and, it may be added, all of them together. Santa Lucia, for instance, is essential to Jamaica. It would never do to trust to ships straight from England for supplying the larger island; an intermediate depot is necessary, and the fleet at Jamaica must be assured that it will find safe coal at no greater distance than the islands. On no other supposition can it be kept at its station in case of threatened scarcity. But in no sense, granting equal navies, can Santa Lucia and Jamaica work together in concert. An expedition cannot be safely combined from points so far asunder; it must first be assembled at one point or the other for starting on its mission. The French islands of Guadeloupe and Martinique presumably could, if convenience required, equip the two halves of a force, and hope to join them before fighting; but Jamaica must stand alone. The battle fleet that moves from the smaller island to it must go in one body, and the constant afterstream of

supply — the communications — must depend upon control of the sea. Santa Lucia cannot help Jamaica, except as a halfway house and depot.

To attempt an expedition to the Isthmus by combining at sea two masses moving from Jamaica and Santa Lucia, they being at war with Cuba, and supposing nearly equal aggregate forces, would run the danger of successive defeats, in detail, of which one illustration has been given in the campaign of 1796 in Germany, and of which several others were afforded in the same year by the Austrians in their management of the campaign in Italy, rendered famous by the skill with which Bonaparte profited by their persistence in dividing their forces so as to be out of mutual support. The Russian conduct of their naval operations in the recent war with Japan affords another warning against division, when the subsequent junction has to be effected within reach of the enemy.

Just here is seen the immense advantage of the strategic position of the island of Cuba at the mouth of the Gulf of Mexico. If the United States permit trade to go on without interruption, supplies of all kinds, even arms, can be obtained by Cuba without serious risk, thus constituting the island a solid base of operations, capable of fitting out an undivided expedition of any size, and of maintaining its fleet in efficiency without serious apprehension as to its communications. For instance, a line of communication from Pensacola or Key West to Havana, supplemented thence by rail to Cienfuegos or Santiago, is almost invulnerable.

This discussion, touching Cuba and Jamaica, like the greater part of this general treatment of naval strategy, proceeds upon the supposition of an equality of naval force. So long as that continues, the relative advantages and disadvantages of Great Britain and the possessor of Cuba remain as stated. In the present (1911) complication

of European politics, the notable feature of which, from the point of view of our subject, is the permanent menace of the German Navy to Great Britain, and conversely that of the British Navy to Germany, it is apparent that neither of those two principal European navies can spare for trans-atlantic hostilities a force superior to that which the United States presumably can maintain, unless the latter at the moment is troubled with hostilities elsewhere. The supposition of equal force in the Caribbean is therefore reasonable as well as useful. Under this supposition, Great Britain as regards Jamaica would have before her two alternatives: one, to divide her fleet so far as to spare a sufficient force to keep open her communications with Jamaica; the other to abandon Jamaica to its own resources, in the fortification of its principal ports and the permanent garrison of the island, until such time as the navy by a successful action should establish preponderance sufficient to maintain the battleships at Jamaica, with a sufficient margin over and above to keep their lines of supply reasonably secure, in the military sense of the word "secure."

Under either alternative, division of the fleet or abandonment of the island by it, this amounts to saying that Jamaica, with all its advantages of situation, cannot utilize them so long as an equal navy is based upon Cuba; because, while Jamaica has a more controlling position towards the Isthmus than Cuba has, Cuba possesses over Jamaica a control which prevents the full use of its offensive strength, inasmuch as its communications are endangered.

This appreciation of the situation should not be allowed to end without noting the illustration it affords of the value of fortified ports. Jamaica fortified can be left to itself for a time; the battle fleet may even concentrate there, and act offensively, so long as the stored resources last. When they approach exhaustion, especially of coal, the battle fleet must depart betimes; and then, unless Jamaica

can stand alone, as Gibraltar once did, and as Port Arthur and Santiago did for measurable periods, Jamaica not only ceases to be useful, as it always would be in absence of the fleet, but Jamaica falls and Cuban control is established over the Caribbean in place of that of Jamaica. The fleet previously resting upon it must operate thenceforth from a more distant base.

This appreciation of the value of Jamaica serves also to illustrate the practical interest of the United States in European international relations. In case of Germany defeating Great Britain in a naval war, the cession of Jamaica might be demanded as a condition of peace; and the West Indies no longer possess great importance in the estimation of Great Britain, since her European relations have led her to concentrate her navy in home waters, and to admit the Monroe Doctrine. Like Heligoland, which she has ceded, Jamaica is of little further use, military or commercial, to the British Empire. The Report of the British Royal Commission (1910) to investigate the trade relations of the West Indies with the Empire, and specifically with Canada, reveals that the trade interests of Jamaica incline more to the United States than to Canada. To yield it could cost scarcely a regret, except that of humiliation. Hence, the determining factor in the bargain, under conditions of defeat, would not be the reluctance of Great Britain but the resistance of the United States. That resistance in the supposed case would rest solely on the naval force the United States could command. Under present conditions, the opposition between Germany and Great Britain buttresses the Monroe Doctrine; granting a decisive victory to either, the buttress crumbles, and the only support remaining is the United States battle fleet.

As to the Lesser Antilles, considered as a base of operations for controlling the other objectives in the Caribbean Sea, we will overlook for the moment the fact that they do

not all belong to one Power, but that, on the contrary, while the greater number are British, the most valuable — Martinique — belongs to France, and we will weigh the strength of the whole line on the grounds given for estimating the strategic value of any point, namely, position, strength, and resources.

By position, or situation, the Lesser Antilles control all the eastern entrances, or passages, including the Anegada. This may usefully be stated in another way, that these islands control the approaches from Europe, while Cuba controls those from North America. North America, with its resources, is both nearer to and better covered by Cuba than is Europe by the Windward Islands, so that the advantage here rests with the Cuban base. The Mona Passage may be looked on as the point where the European and American circles of influence touch. As for control over the Isthmus depending upon position only, the small islands are double the distance of Cuba from the Isthmus, which means double the line of communications, double the ships to guard them, and double the coal to be burned.

As to strength, the Lesser Antilles have several excellent strategic ports. The finest is Fort de France, in Martinique, at the center of the line. This position, and the lack of closed harbors in Dominica, aid in fixing Santa Lucia as the English base. From Santa Lucia Rodney watched the French fleet before his well known victory in 1782. In olden times, Barbados had the strategic advantage of being well to windward, but is now unused. Next in importance to Santa Lucia for the British is Antigua; while the French have a yet better position than Antigua, in Guadeloupe and its dependencies. It will be noted that the French islands lie close to one another and separate the two best English.

Let us, as before, suppose these islands under one control, though the event is unlikely. For putting forth offensive

strength, the enemy not acting against them directly, there would be convenience in distributing the preparations among the different ports, and safety in not having to depend upon one only in case of reverse; communications between the ports would be short and easy. So far, and in these respects, the distances between her principal ports leave Cuba at a disadvantage; but in case of attack by the enemy, the fleet of the Lesser Antilles, if decisively defeated, must retire into one port, which is thenceforth isolated from the others by the enemy's possession of the sea. The situation would be still worse if the battle fleet divided and retired into several ports. The weakness of small islands, as compared with large ones, will at once appear. Cuba, under the same conditions of sea-defeat, could retire into one port, the others remaining open and with free communication throughout by land. If the enemy seeks to blockade the other ports he divides and weakens his fleet, in face of the Cuban ships left in the harbor to which they have retired. A fair weighing of these conditions seems to leave no doubt that Cuba is decidedly stronger than any combination of smaller islands.

As to resources, those of all the West India islands for war will depend mainly upon the policy and preparation of the governments. Except Cuba, they are deficient in natural resources adequately developed. Outside of direct governmental action it can only be said that the much greater population of Cuba will draw more supplies and furnish more material for troops and garrisons. At present, as already noted, the resources of the United States are in effect also the resources of Cuba.

As between the three possible bases for attempted control of the Caribbean, no doubts can remain that Cuba is the most powerful, Jamaica next, and the Antilles least. Jamaica being where it is, Cuba cannot put forth her power against the Isthmus or against the lines of transit in

the Caribbean, until she has materially reduced, if not neutralized, the offensive power of her smaller opponent. Upon the supposition of equal fleets, if the Cuban fleet move against the Isthmus, or into the Caribbean, it uncovers its communications; if it seeks to cover these, it divides its force. Jamaica exactly meets the case supposed in a previous chapter (p. 209): "If, in moving upon the coveted objective you pass by a strategic point held by the enemy, capable of sheltering his ships — a point from which he may probably intercept your supplies of coal or ammunition, the circle of influence of that point will require your attention and reduce your force."

In that case it was laid down that, if you cannot observe the port without reducing your fleet below that of the enemy, you must not divide it; either the intermediate point must be taken, or, if you think you can accomplish your special aim with the supplies on board, you may cut loose from your base, giving up your communications. Undoubtedly, the same difficulty would be felt by the Jamaica fleet, if it moved away from home leaving the Cuban fleet in port in Santiago or Guantanamo; but, of the two, Jamaica has the inside track. It is not so with operations based upon the Lesser Antilles only, and directed against the Isthmus, or against any position in the western basin of the Caribbean, Cuba being hostile; the line of communication in that case is so long as to be a very serious comparative disadvantage.

Upon the whole, then, Jamaica, though less powerful than Cuba, seems to deserve the title of the "key to the Caribbean." Only when Cuba has mastered it can she predominantly control the positions of that sea. But if Jamaica in this sense be the key, Cuba has the grip that can wrest it away. Secure as to her own communications, in the rear, towards the Gulf of Mexico, Cuba has it in her power to impose upon her enemy a line so long and insecure

as to be finally untenable. First a scarcity of coal, then a famine, lastly the retreat of the Jamaica fleet to the most available coal station. Such is the solution I believe possible to the military problem of the Caribbean as dependent upon geographical conditions, — that is, upon positions; concerning which Napoleon has said that "War is a business of positions." The instant the Cuban fleet has gained a decided superiority over that of Jamaica, it can take a position covering at once the approaches to that island and the Windward Channel, keeping all its own ships in hand while cutting off the enemy's supplies and reinforcements. The converse is not true of the Jamaica fleet, in case it gains a momentary superiority, because the southern ports of Cuba should be able to receive supplies by land, from the Gulf of Mexico through Havana.

The general discussion of the strategic features of the Gulf of Mexico and Caribbean ends here; but the treatment of the subject will not be complete, unless there be some further specific consideration of the bearing which the conclusions reached have upon the facilities of the United States for naval action in the region studied.

This specific application to the United States is certainly not the least important part of the work, since it has been the underlying motive for undertaking it at all. For this application, the most satisfactory method that has presented itself is (1) to state again the conclusions of twenty years ago, substantially as then written, in 1887, with alteration only of recognized errors then made; and (2) upon this to note the changes in the intervening period, with their effect upon the general strategic situation.

A further reason for employing this method of contrast between two political epochs is that it tends to promote the study of consecutive international relations; for these are so closely related to Naval Strategy as to be one of its chief component elements. The attention of naval officers needs

to be aroused to the necessity which there is for them to keep a close and reflective outlook upon the international relations of the world. In this view, it will be useful here to recall what the international conditions were twenty-four years ago, when these lectures were first written, and to contrast them with what they are now.

In 1887, and for the ten following years, the United States was growing continually more alive to its particular interest in the Isthmus, and more impatient under the fetters imposed upon it by the Clayton-Bulwer Treaty of thirty-five years before. Nevertheless, she had no assured rights in the Isthmus, except that clause in the Treaty of 1846 with Colombia, which permitted interference on behalf of security of transit. This permission was necessary, to carry out the guarantee of such transit which had been given to Colombia in the same Treaty. The guarantee and the permission were correlative stipulations. It will be remembered that in virtue of these clauses, in 1885, upon revolutionary movements occurring around Panama, rendering the use of the railroad precarious, a force of marines was dispatched from the Atlantic ports, which landed on the Isthmus and assumed control of so much of the territory as was necessary to protect the road and insure its working.

I was there at the time and remember two incidents, each of political significance. There being no American vessel at Panama, nor, I believe, at Colon, the British naval officer present had landed a detachment, which was in possession of the Panama terminus when the ship under my command arrived there. I recall his expression of relief that we had come to take the business off his hands, as he felt doubtful how far his interference would be approved by his Government, even under the circumstances. The other incident was that the French admiral on the Pacific Coast, coming to Panama a little later, offered assistance in maintaining quiet; which offer was declined by Admiral Jouett, although

the French canal was still under construction. It was evident to me that the French officer did not relish the refusal; but both occurrences possessed interest, as showing with what increasing seriousness the attitude of the United States towards European interference at the Isthmus was being taken by European governments.

Beyond this contingent right of interference, in a case of local anarchy around the Panama railroad, the United States in 1887 had no foothold in the Caribbean. She also had no navy. The so called White Squadron, of three protected cruisers, had but just been commissioned. Great Britain and France were still the two chief naval states, and both had exactly the same possessions in the Caribbean that they now have. Spain still held her immemorial possession of Cuba and Puerto Rico. The German navy, like the American, was substantially non-existent. It had been begun; but neither in fact nor in intention was it yet one of the great navies of the world. The first Emperor, William I., did not die until 1888; Bismarck's power was unshaken; and the experience of both these statesmen tended to fasten their attention chiefly upon Europe as the scene of German diplomacy, and upon the army rather than the navy as the instrument of German power. The German naval development we now see was not even suspected, any more than was the military eminence of Japan. Since then, the present international paralysis of Russia has freed Germany from apprehensions of the Franco-Russian alliance, to an extent which has facilitated the huge German naval expenditures of to-day. In 1887 this paralysis did not exist. Despite obvious weaknesses, the Russian autocracy was unshaken then by internal dissensions; and, owing to the position of Russia, Russian military strength was traditionally an immense factor in German calculations. Briefly, it is the defeat of Russia by Japan, and the consequent revolutionary movement in Russia, which have assisted

Germany so to enlarge her navy as to overpass that of the United States. If this be so, and I think it surely is, of what international shifting of balances can it be affirmed that it is too remote to concern the naval strategist?

Internationally, in 1887, the Clayton-Bulwer Treaty still bound the United States to share control of an Isthmian Canal with Great Britain. The two states were to guarantee mutually the neutrality of any canal, which it seemed in 1850 would be built by American enterprise, if built at all. Since 1887, the date of these lectures, the Clayton-Bulwer Treaty has yielded to the Hay-Pauncefote, which leaves the constructing of the Canal and the guarantee of its neutrality to the United States alone. From being without possessions in the Caribbean, the United States has now political control of the Canal Zone, with qualified exceptions in the cities of Colon and Panama. The Zone is to be fortified, and the United States besides has acquired Guantanamo and Puerto Rico, with the adjacent harbor of Culebra. She has now a navy, which a year ago was second only to the British. A secondary naval position so far was, and is, natural; and the less unacceptable because Great Britain, not by formal instrument, but by evident purpose, has abandoned entirely all contestation of predominant American interest and control in the Caribbean.

The "Manifesto" of the Unionist Reveille in Great Britain, a movement intended to promote the sea power and imperial development of the Empire, uses the following expression: "By the Japanese Alliance, by the Indian Empire, by the Egyptian occupation, *by support of the Monroe Doctrine*, British Sea Power has repeatedly within the last few years guaranteed the wages of Lancashire."[1] The words by me italicized indicate what may be presumed a popular recognition of this policy, as standing on grounds similar to the others recited.

[1] *The Mail*, (Tri-Weekly Times), October 19, 1910.

This change of British policy is due largely, if not decisively, or even solely, to the growth of the German Navy; and therefore ultimately, if our previous analysis be correct, to the defeat of Russia by Great Britain's ally, Japan. It is to the war in the Far East that is due the full development of this great factor, the German navy, which now both in actual power and declared purpose is, and will continue, superior to that of the United States. In the intention of the United States Government, as far as shown by propositions or appropriations, the purpose as yet is to allow Germany to keep the lead she now has, and to increase it in the future. France meantime, since 1887, has receded from the second to the fourth or fifth place in the order of naval states.

The significant feature in this shifting of naval power is that it corresponds to the increase of national power, as manifested in the raw material of population and wealth, achieved by Germany since 1879, when the present German industrial and commercial evolution began. This evolution has already brought Germany into sharp rivalry with Great Britain. In maritime commerce the second place among European states is now occupied by a nation which to an enormous population and industries adds but little in useful external possessions; while France, which had and has an abundance of these, is supplanted as a naval power. The commercial and naval development of Germany, combined with the relative smallness and poverty of her outlying possessions, is one of the universal factors in the international relations of to-day. It constitutes a national impulse, already recognized, which, like other forces, will take the line of least resistance; but until that line is definitely indicated, it may be found in any part of the world. Consequently, one of the features of the strategic conditions of the Gulf and Caribbean, as well as of most other parts of the world, is that

the German fleet is superior to every other, except that of Great Britain.

Leaving here the question of the contrast in international conditions between 1887 and 1911, we will proceed to contrast the positions of the United States in the Gulf and Caribbean at the same two dates.

In 1887, the positional hold of the United States in those waters was stated thus:

"The interest of the United States in the Central American Isthmus and Canal is admitted by men of all classes. Putting aside the question of military preparation, which is alarmingly out of proportion to our talk, the strategic situation of the United States is as follows:

"On the Gulf of Mexico are two first-class strategic points — the mouth of the Mississippi and Pensacola. They have their weaknesses, which must be strengthened, or 'fortified;' but they can be made points of much strength. The distance between them is not great; and by utilizing the hydrographic advantages of the intervening coast line, for the operation of torpedo-vessels and submarines, these two ports could be kept in effective communication by sea, and together form a base.

"Key West is an advanced post at a critically important point. It is dependent upon the sea for its communications; but, for a fleet which is not hopelessly weaker than its enemy, it can be made a safe harbor to coal or repair. Tampa Bay, within two hundred miles, is a railroad terminus and a good harbor. Counting the North West Channel to Key West, although that is not practicable for large ships, Key West has two distinct lines of supply — from the Atlantic and from the Gulf — while the distance the Keys project to the westward, about thirty miles, will lay on an enemy the necessity of some division of his ships to watch both these lines. The lumpy nature of the bottom for some distance to the eastward will also favor the lighter vessels and local knowledge of the defendant, when running in supplies.

"Still, when all that can be said in favor of Key West has been said, it is not possible to put it in the first rank of military ports, because of its deficiency in natural strength and entire lack of natural resources, as well as of its anchorage exposed to gun fire from the sea. While its

situation on the Straits of Florida makes it of the first consequence to the United States, which has not one other there, that very situation, at the extremity of a long salient with no perfectly secure line of communications either by land or by water, demands in a post so exposed an inherent strength that Key West has not; as Gibraltar for instance has had, and in great measure still has. A United States fleet operating in the Straits of Florida, against an enemy of equal strength but better based, could never have Key West off its mind — it would lose freedom of maneuver. If a bold offensive stroke should be thought of, requiring an absence of say a week or ten days, the fear would be always present as to what the enemy might do while the fleet was away.

"It is this weakness of Key West and the difficulty of keeping up its supplies that justify to me the holding of the Dry Tortugas, which I once thought useless. Two points of supply make it more difficult for an enemy to prevent the communications of either with the continent, and so allow the fleet resting upon them more freedom of maneuver. An enemy wishing to force action can do so if he gets between a fleet and its coal, for a fleet, like an army, has got to fight if its communications are at stake; therefore, it is desirable to have more than one coal station on any frontier of operations. With Key West alone, an enemy might force our fleet either to fight or to retire upon Pensacola. Tortugas, if it can be held, is on the Straits, allows exit in more than one direction, and is far enough from Key West to embarrass the enemy somewhat; though doubtless a greater distance would be better.

"The Florida Strait is the only water communication between the Atlantic and Gulf coasts of the United States; unless indeed the alternative be embraced of passing south of Cuba, by the Windward Passage, and through the Yucatan, as Dutch fleets once went round about north of the British islands when they found the English Channel too dangerous. A fleet of twelve ships well based in the Straits, as at Havana, could contend on terms of advantage with a much larger number divided between the Atlantic and Gulf coasts. In virtue of its situation, and with a proper scouting system, such a fleet should be able to prevent the junction of American divisions starting from, say, Pensacola and Norfolk; should be able to meet and

fight them separately; and this, notwithstanding the facilities for combining such a movement conferred by steam and telegraph. Equally with the above, a United States fleet resting upon Key West, if duly fortified, will prevent a somewhat superior enemy from dividing his force between the Atlantic and the Gulf; and indeed will compel him to keep his ships united, because, if divided for any reason, and in any directions, even upon a single coast, they may be attacked in detail. This necessity of remaining united restricts greatly the scope of offensive operations open to an enemy on a coast. The impracticability under such circumstances of acting simultaneously against the Gulf and the Atlantic is obvious; but this is only the supreme illustration of the effect exercised by a concentrated body centrally placed.

"These considerations show the inalienable military importance of Key West due to situation, which is the primary requisite of strategic value. The importance is of the same kind, though much greater in degree, that is found to attach to all capes in coast warfare; the importance attaching to salients, because of the natural weakness they constitute in forcing a route, or a position, out towards the enemy. For this reason they are points of particular exposure to one side, demanding fortification, and of particular control to the other. Both reasons contribute to their importance, which becomes immensely emphasized when, as in the peninsula of Florida and that of Korea, they cannot well be avoided by a circuitous route. Commercially, the strait is no less important to the United States. The city of New Orleans is the second city for exports in the United States, the fifth for imports. It has outlets to the ocean and to the Caribbean, both of which may be commanded from the Straits of Florida; and if access to the Atlantic can be had by rail, though at loss and inconvenience, it is not so with the road to the Isthmus."

From all these considerations, somewhat amplified from the brief summary of them made in 1887, it appears that Key West was then and is inalienably, by situation, a place of the utmost importance; but that it also was then, as it is now, deficient in natural resources and in the natural defensive strength which, while most desirable in any mili-

tary port, is particularly essential to one so exposed by its saliency.

The conclusions of 1887 about Key West were stated as follows:

"It is evident that the United States, owing to the weakness of her base upon the Gulf, and to the fact that she has no solid possessions in the Caribbean Sea, is not only at a great disadvantage, from the military point of view, for asserting her influence at the Isthmus, but is exposed to serious direct injury in the mere maintenance of her existing home interests, dependent as they are upon free access to the ocean and the Caribbean through the Straits of Florida and the Yucatan Passage.

"The remedy for these evils, if their existence be granted, is a subject that belongs to the province of our statesmen. Nevertheless, while the applying of any remedy is primarily a political question, the character of the remedy to be applied, being intended to cure military evils, must be determined by military considerations."

That is to say, military and naval men, from their habit of mind and their acquirements, should be the most competent advisers to the statesmen of a country, to indicate to them what positions are most profitable to obtain by the conduct of diplomacy, as in the case of Heligoland, Cyprus, Hong Kong, Hawaii, Kiao Chau, and others; or as the result of a successful war, as in the instances of Malta, Gibraltar, Guantanamo, Culebra, and the Philippines. An accurate understanding of the principles upon which such recommendations are to be founded can be reached only by previous careful preparation, by previous acquaintance with historical antecedents, and by studies such as that which has been pursued here. It may be added, though a reiteration of what has already been said, that a sustained familiarity with the international relations of the day, as well as an historical acquaintance with the political history of the past three centuries, is essential to an officer's equipment for such duties.

In final succinct summary, the general conclusion in 1887 was that the Gulf base of the United States, as constituted at that time by the Mississippi, Pensacola, and the advanced post Key West, was weak, as compared with the positions held by other nations for the control of the Caribbean Sea, and of that especial point of vital importance to the United States, the Isthmus of Panama. Further, it was intimated, cautiously but clearly, that positions corresponding to Cuba and Puerto Rico — that is, ports supporting control of the Windward and Mona Passages, — were essential to the establishment of the positional advantage needed by the United States. Stress was laid upon the long barrier constituted by Cuba and Haïti, if reinforced by control of the passages named; and, withal, insistence was constant upon the necessity for an adequate navy, without which mere positions are inert and ineffective tenures. The defensive weakness of Key West, notwithstanding its strong offensive situation, was emphasized, as enforcing the need of other positions, and it was evident that whatever might still be said in favor of the traditional claims of Pensacola and the Mississippi, their relative remoteness placed them at disadvantage when contrasted with Jamaica and the south shore of Cuba. The Gulf ports were in fact substantially as distant from the Isthmus as are Martinique and Santa Lucia; they were more shut off from the great ocean; and the route from them to the Isthmus passed closer under the reach of Cuba. The remark may be interjected here that the great advances in the size of battleships can scarcely fail to affect unfavorably Pensacola and the Mississippi, as compared with Atlantic ports, and with Guantanamo; on account of hydrographic difficulties, and of those arising from an inevitable increase of draught of water, corresponding to the increased dimensions. What may be the exact effect upon the ports named, exerted by these changes, I cannot

precisely say; nor is it necessary here to do more than direct attention to the subject, and to suggest a careful comparison between them and Guantanamo in the particular matter mentioned, and as to suitability for docks.

Since 1887, and in consequence of intervening events, the United States has come into possession of ports, the position of which confers the ability to control the passages named. Thereby, and so far, the great obstacle, or barrier, constituted by the prolonged line of Cuba, Haïti, and Puerto Rico, is in American hands, requiring only the necessary great fleet to assure control. All that was said about Cuba and its sphere of control is realized to the United States, except the actual use of the island itself, of its resources, and especially of its railroads. The control predicated of the Mona Passage by the occupation of Samana Bay is more than realized, and further extended, by the possession of Culebra. So far as position goes, the influence of Cuba, as before analyzed, is now in the hands of the United States; and under these circumstances Key West may be regarded as the equivalent of Havana for control of the Straits of Florida. This is the more true in view of the intervening development of communications of Key West, actual and prospective, and of the artificial resources of the island. These will be found stated at length in an article contributed to the Naval Institute Proceedings, June, 1908, by Commodore Beehler,[1] whose knowledge of the conditions then was personal and close. The question of fortification, and of exposure, owing to the open character of the anchorage, which affords no cover of intervening land, nor height for batteries, has not yet been fully met and resolved.

Contributory to the formulation of a general scheme of fortification in the Caribbean and Gulf, behind which can be

[1] Commodore Beehler has since contributed a further discussion of the value of Key West to the *Military Institute Journal*.

sheltered a local accumulation of resources, — in particular, several docks, the very most important of the resources of a fleet in time of war — it becomes essential to consider and to decide which of the two ports, Guantanamo or Key West, is the better fitted, by position, strength, and resources, to serve as the pivot upon which should hinge the operations of a United States fleet in a war, the motive of which is the control of the Caribbean in order thereby to retain control of the Isthmus. Adequate preparation of this character tends to avert war.

All such questions are complicated by conflicting conditions, some of which induce preference to one port, some to the other. Primarily, Key West is on United States ground; and when the railroad is completed it will have communication with the heart of the country by land, as well as by sea. I infer from Beehler's article that the danger of sea raids against the railroad may be obviated by small vessels acting among the network of shoals which skirt it, the navigation of which will be more certain by far to the defender than to the offense. Guantanamo, on the contrary, like Gibraltar, is separated by long water distance from the United States; therefore, again like Gibraltar, it must depend upon large accumulated resources for power to hold out, and ultimately upon sea communications, secured at least from time to time by big convoys; for no resources are inexhaustible, if not renewed.

Yet, on the other hand, no English home station has ever compared with Gibraltar for control of its special sphere — the Mediterranean. The historical course pursued here has told us that without permanent positions in the Mediterranean the British navy found it impossible to remain effectively on the scene. Hence the seizure of Gibraltar; and, in the same war, of Minorca. At a later date Malta was taken; because, as Nelson said long before the Suez Canal was designed, "Malta is important to the control of

India." In the old great wars, the British Mediterranean fleet depended for immediate efficiency on resources accumulated locally, in positions secured for that purpose. It had to hinge its operations on local bases, to which the home country simply contributed a stream of supplies and resources.

Local operations must have local centers; and to determine a question such as that between Guantanamo and Key West it becomes necessary to determine the scene and character of operations most conducive to the end in view; most suitable for defense and for offense. If defensive and offensive values do not coincide, the preference goes to offensive use. Finally, such a question involves not merely the respective individual fitness of the two ports considered, — here Key West and Guantanamo, — but their relations of service one to the other. Does one defend the other and its specific field of influence to a greater extent than it receives such defense in turn? Does one, while thus defending, give also better opportunities for offensive action, itself the best method of defense?

In a war involving the Gulf of Mexico and the Caribbean Sea, the United States will have its defensive side clearly outlined by the commercial necessity of controlling the Straits of Florida as the outlet — and inlet — of the Mississippi Valley. The offensive side of the war will be the control of the Isthmus. True, present occupation there gives now a defensive aspect to such control of the Isthmus; but nevertheless, as the supreme center of effort, much surpassing that at the Straits of Florida, the Isthmus represents the offensive side. The superior power of Guantanamo for effect at the Isthmus is therefore offensive power, and in so far the more valuable. Further, as a mere question of defense for the Gulf and its approaches, Guantanamo represents, and is the center of, an advanced line of operations, constituted by Cuba, Haïti, and Puerto

Rico; the two wings of which line are Key West and Culebra. Such a line, adequately held by a fleet, will, as we have seen in other historical instances, cover all in its rear, including Key West and the entire Gulf, from molestation except by raids. The possibility of raids can never be wholly eliminated; and moreover, although they may be harassing, they are rarely, if ever, vitally injurious. A conspicuous instance of a successful raid was the capture by the British admiral Kempenfelt, in December, 1781, of a dozen French transports proceeding to the West Indies under convoy. Large as this success was, it did not prevent the sailing of the expedition against Jamaica, in April, 1782, the wants of which the captured vessels were in part to supply. The failure of the expedition was due, not to the raid, but to Rodney's victory over the French battle fleet.

Offense, against the Isthmus, and defense, of the Gulf, meet at Guantanamo. Guantanamo, in fact, represents effectively Cuba, in the discussion through which we have just passed; though the possession of a single port is of course less effectual than would be that of the whole island. Conversely, Jamaica holds over Guantanamo the control which, as has been pointed out, it holds over the whole island of Cuba in respect to the Isthmus. Jamaica flanks all lines of communications. But it flanks equally those of Key West to the same point, for they must follow the same routes as those from Cuban ports. Key West in this has no advantage over Guantanamo; while Guantanamo has the very great advantage that a battle fleet there has its grip upon every line from any part of the world to Jamaica. In the early lectures it was shown that, on the supposition of equal forces, Santiago paralyzed Jamaica. Under the changed conditions of to-day we have simply to substitute Guantanamo for Santiago, as regards position. As regards strength and resources, especially for provision of docks,

there appears to me distinct advantage at Guantanamo for defensive works. In both places resources must be a matter of prevision and accumulation.

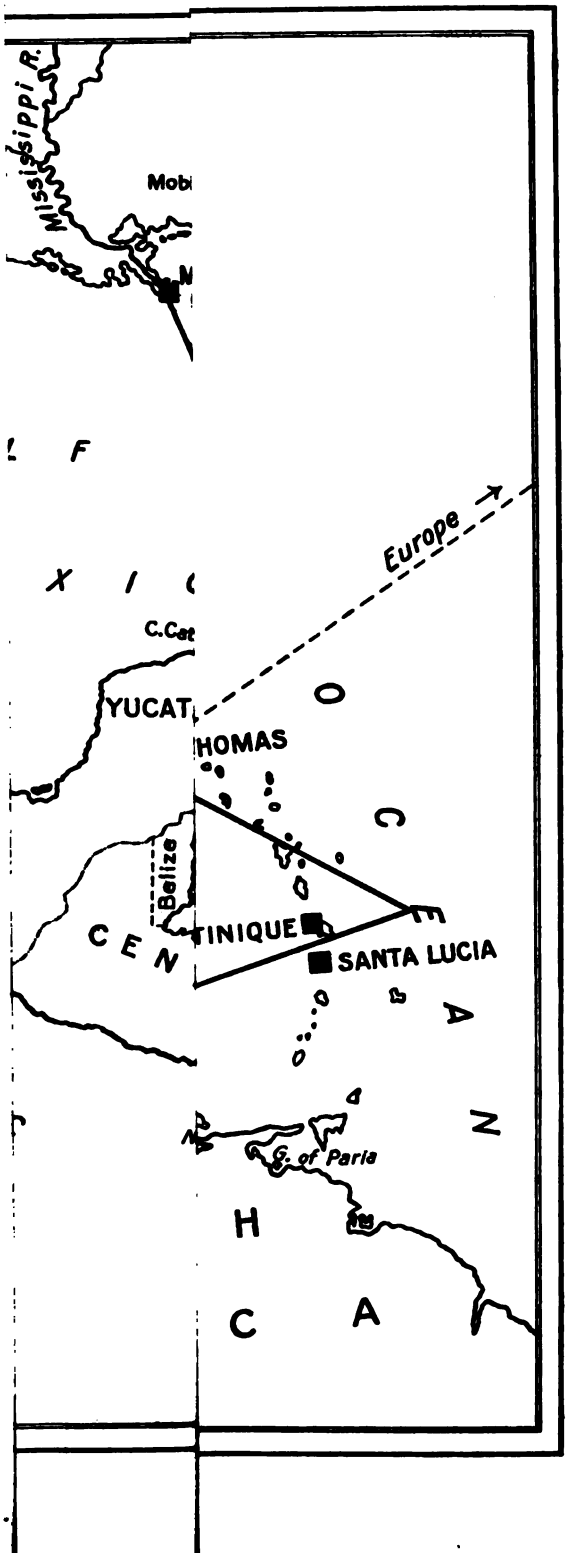
The effect of the changes of the past twenty years, wrought by war and by diplomacy, has thus been to confer upon the United States the opportunity to control the line which the studies of the earlier period had shown most effectual for military and naval action in the Caribbean Sea.

The series of papers of which this is the last has been written under a conviction that steam, while it has given increased certainty and quickness of movement to fleets, has also imposed upon them such fetters, by the need of renewing their fuel, that naval enterprises can no longer have the daring, far-reaching sweep that they once had, but must submit to rules and conditions that armies have long borne. Invasions by land can be only gradual; a certain distance gained, depending upon very varying circumstances, must be made good before a new step is taken, and the whole line of advance must be bound together in successive links. It has not always been so at sea. Very long and distant operations could be undertaken by the derided sailing ship, because sure that there was no article of absolute necessity which it could not find wherever it went. The occasional embarrassments of food and water were met by the accommodating human body submitting to half rations. With coal, communications have come; and communications mean that, link by link, even if the links be long, the expeditionary force must be bound to the home country as a base.

The Caribbean Sea and the Isthmus of Panama furnish the student of naval strategy with a very marked illustration of the necessity of such cohesion and mutual support between military positions assumed; as well as between those positions and the army in the field, — that is, the navy. It affords therefore a subject of the first importance for

such a student to master, and that in fuller detail than is expedient for a series of lectures, the object of which should be to suggest lines of thought, rather than to attempt exhaustive treatment. For an American naval officer, the intimate relation of the Isthmus and its coming canal to the mutual support of the Atlantic and Pacific coasts renders the subject doubly interesting. This interest is yet farther increased by the consideration that the general international importance to commerce of such a point as the Canal can scarcely fail to make the conditions of its tenure and use a source of international difference and negotiation, which often are war under another form; that is, the solution depends upon military power, even though held in the background. There are questions other than commercial dependent upon the tenure of the Isthmus, of which I will not here speak explicitly. To appreciate them fully there must be constant reading and reflection upon the general topics of the day.

One thing is sure: in the Caribbean Sea is the strategic key to the two great oceans, the Atlantic and Pacific, our own chief maritime frontiers.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CHAPTER XIII

DISCUSSION OF THE RUSSO-JAPANESE WAR

THE War between Japan and Russia is still of such recent date that the principal events, as well naval as military, and the discussions to which these events give rise, may be assumed to be vividly present to the minds of a naval audience. There may seem, therefore, a certain presumption in undertaking to deal with them afresh, so soon, and in view of the many who have treated them. It would appear that from so many points of view there would have been thrown upon the subject all the light, and have been revealed all the aspects, in which it can be considered.

The subject, however, is of such marked value to the development of a treatment of Naval Strategy that I feel compelled not merely to use it as illustrative, casually, as occasion arises, but to undertake also a somewhat formal narrative and commentary; stating principles involved; and eliciting, as fully as I can, the lessons which the history of this contest conveys to us. It of course has to me personally the particular interest of illustration subsequent in date to the course of lectures on Naval Strategy, the revision of which is the object of my present duty with the College. By illustration I mean not merely confirmation of the ideas put forth in those earlier lectures, but also the correction of them, where faulty or defective.

I have been led, on an occasion not immediately connected with Naval Strategy, to observe that errors and defects are more obviously illustrative of principles than successes are. It is from the records of the beaten side that

we are most surely able to draw instruction. This is partly due to the fact that the general or admiral who is worsted has to justify himself to his people, perhaps also to his Government. The naval practice of court-martialling a defeated captain or admiral has been most productive of the material which history, and the art of war, both require for their treatment. Even failing a court-martial, defeat cries aloud for explanation; whereas success, like charity, covers a multitude of sins. To this day Marengo is the victory of Napoleon, not of Desaix; and the hazardous stretching of the French line which caused the first defeat is by most forgotten in the ultimate triumph. The man who has failed will of his own motion bring out all that extenuates failure, or relieves him from the imputation of it. The victor is asked few questions; and if conscious of mistakes he need not reveal them. More can be found to criticize Kuropatkin and Rozhestvensky than to recognize either their difficulties or their merits. Probably few, even in this naval audience, knew, or have noted, that on the day preceding that on which two Japanese battleships, the Hatsuse and Yashima, were sunk by Russian mines, not a Japanese scout was in sight, to notice the Russian vessel engaged in the work which resulted so disastrously to its foes. On that day, during that operation, no Japanese vessel was visible to the lookouts at Port Arthur.

For the reasons advanced, I turn at first, and more particularly, to the Russian naval action for illustration of principles, whether shown in right or wrong conduct; and here I first name *two* such principles, or formulation of maxims, as having been fundamental, and in my judgment fundamentally erroneous, in the Russian practice. These are mental conceptions, the first of which has been explicitly stated as controlling Russian plans, and influencing Russian military ideas; while the second may be deduced, inferentially, as exercising much effect. The first,

under the title of "Fortress Fleet," is distinctly Russian; realized, that is, in Russian theory and practice, though not without representation in the military thought of other countries. The second is the well known "Fleet in Being;" a conception distinctly English in statement and in origin, although, like the first, it finds reflection in naval circles elsewhere. I shall not at this point define this conception "Fleet in Being." I shall attempt to do so later, by marking its extreme expression; but to do more will require more space than is expedient to give here, because full definition would demand the putting forward of various shades of significance, quite wide in their divergence, which are attributed to the expression — "Fleet in Being" — by those who range themselves as advocates of the theory embraced in the phrase.

It is, however, apt here to remark that, in extreme formulation, the two theories, or principles, summed up in the phrases, "Fortress Fleet" and "Fleet in Being," are the antipodes of each other. They represent naval, or military, thought polarized, so to say. The one lays all stress on the fortress, making the fleet so far subsidiary as to have no reason for existence save to help the fortress. The other discards the fortress altogether, unless possibly as a momentary refuge for the vessels of the fleet while coaling, repairing, or refreshing. The one throws national defense for the coast lines upon fortifications only; the other relies upon the fleet alone for actual defense. In each case, coöperation between the two arms, fleet and coast-works, is characterized by a supremacy of one or the other, so marked as to be exclusive. Coördination of the two, which I conceive to be the proper solution, can scarcely be said to exist. The relation is that of subjection, rather than of coördination.

Before proceeding to discussion of the effect shown upon Russian action by these two principles, and the consequent

results upon the Russian fortune of war, let me submit to you one consideration, which has in my eyes the merit of being applicable to opposing realities in all decisions of life.

In the case of oppositions such as that before us, truth, a correct decision, is not to be found by seeking at once a middle course; what we call a compromise. Truth — that is, a right conclusion, or solution — is most surely to be reached by grasping both the ideas, which underlie the opposing statements; grasping them, I mean, in their full force, even in their extreme force and impression, such as the two expressions convey. When that impression shall have been fully produced in your mind, you can then proceed to give each element — coast fortress and fleet — its due weight, its due consideration, in the national scheme of military and naval policy. Undoubtedly, the result will not be, should not be, the exclusive acceptance of either, as professed by the two schools of thought. The conclusion reached will undoubtedly be somewhere between them — not necessarily midway between; and, because thus between, some may insist that, by the course which I suggest, you have after all only reached a "compromise." I prefer to call it an "adjustment," a word the meaning of which differs from compromise in the syllable "just," — exact — the French *juste*. Such justness, precision, in allotting due weight to opposing factors, can be attained only by the mental processes which first of all feel the full weight of both, and which consequently, in apportioning consideration to one, is constantly and adequately sensible of the importance of the other. He who starts to compromise, without such previous care to be mastered by both considerations, will invariably, despite himself, begin with a prepossession; with a bias towards one which will not be properly checked by continuous recollection of the other.

Compromise and Adjustment both have to take account of the same conditions; but they start from different points

of view, and are characterized by essentially different spirits. They represent opposing conceptions; the dictionary does not give compromise among the synonyms of adjust. The mark of compromise is not concentration, but concession; and concession in practice means diffusion among several objects, not coördination of them all upon a central idea, which is true concentration. The purpose of compromise is *not to yield, decisively, any one* of several desirable things, which yet are not perfectly reconcilable. It intends to embrace them all, not under a unified conception, but in a composite concrete result; such a result as a finished ship of war, or the active conduct of a campaign. It effects this result by conceding all round.

To the production of a ship of war, or to the direction of a campaign, when in operation, there is an antecedent intellectual process, to which is applied the generic term, conception. In a ship this is called specifically the design; in a campaign, the plan. This design, or plan, must take note of all these desirable, yet irreconcilable, qualities; but, to do so effectively, it must start with the recognition that it is not possible to have them all, that one must be selected as predominant, the others frankly and fully subordinated. This mental attitude Napoleon styled "Exclusiveness of Purpose;" and, in adopting his assertion of it as essential, I note that it is the opposite of Compromise, and therefore suggest that, in place of the usual word "Compromise," "Adjustment" would be an improvement in our naval vocabulary. When the extremely difficult attitude of mind which Napoleon thus commended, and so remarkably exemplified, has been attained, when a man is really determined that one of several qualities in a ship, or one of several lines of action in a campaign, is to yield nothing that is not absolutely necessary to yield, while all the others are to yield everything they can safely be made to yield, the ensuing design, or plan, may indeed show mis-

takes, but it develops under the most favorable conditions. Exclusiveness of purpose, and that which we call compromise, are frames of mind, and of character; they represent mental and moral conditions which, whether natural or acquired, are bound to show themselves in action, as surely as a man's natural disposition and capacities show themselves in his daily life. Fortress Fleet and Fleet in Being are not merely mental conceptions; they are moral characteristics which will pervade action.

Exclusiveness of purpose, I apprehend, recognizes from first to last that opposites *are* opposites, and that therefore, however much a man may wish both, he cannot have both effectively by conceding something to each, parting with something of each; for thus he effectually gets neither. In strategy a very familiar instance is the defense of a mountain frontier with several passes, or of a river with several fords.[1] The enemy may attack by any one; it is desirable to defend all. The force for defense is limited, fixed, a constant quantity, as is the number of passes or fords; the constant force corresponding herein to the disposable tonnage of a ship, and the number of passes to the several qualities desired in her, — as offensive power, defensive power, speed, coal endurance. In the defense of a frontier there have been two systems. One (1), called the *cordon* system, spread along the line to be defended, was unwilling to leave any pass unprotected, consequently divided the given force among all. That is compromise. All cannot be adequately defended, so something is conceded to each, which involves diminishing also from each what would be really adequate; and none is effectively protected, nor can the others move readily to its support.

The system now universally conceded to be sound is distinctly exclusive in purpose. That is, it has one predominant idea, which is, to station the available force in such

[1] See diagram facing page 388.

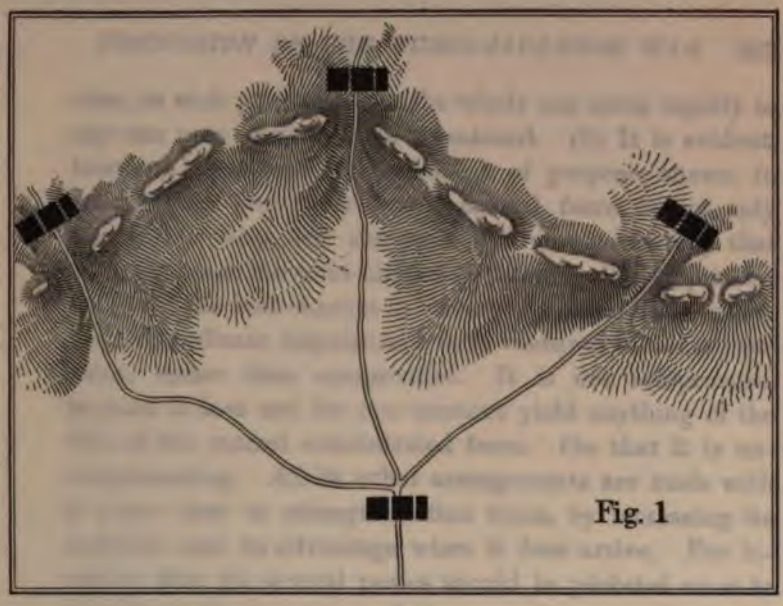


Fig. 1

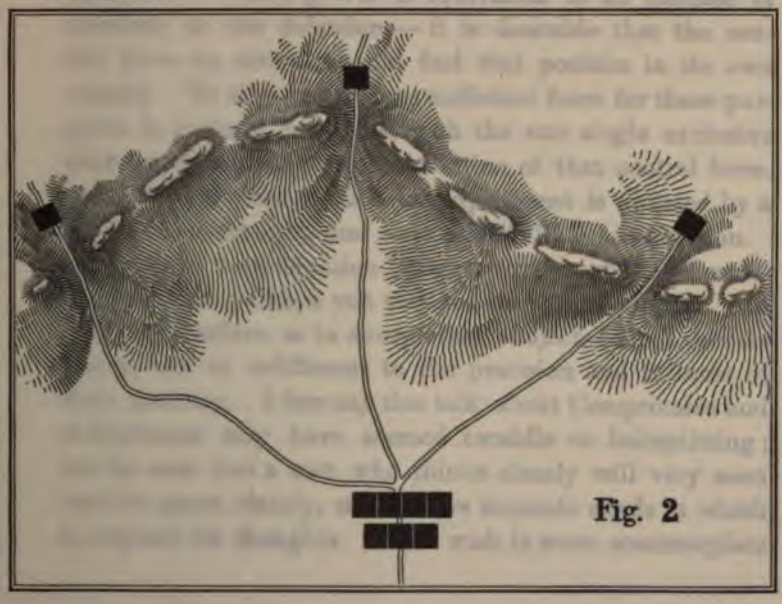


Fig. 2

wise, in such position, that the whole can move rapidly to any one pass or ford when threatened. (2) It is evident, however, that such exclusiveness of purpose, shown in constituting one predominant central force, is not only compatible with, but demands, the means whereby that force can reach the point ultimately threatened most quickly, and with the best chances in its favor when it does arrive. This subordinate disposition I have ventured to call adjustment, rather than compromise. It is not compromise, because it does not for one moment yield anything of the idea of the central concentrated force. On that it is uncompromising. All its other arrangements are made with a clear view to strengthen that force, by increasing its mobility, and its advantage when it does arrive. For instance, that the several passes should be picketed so as to give the earliest warning of the enemy's approach, is evident. It is evident also that if there be in any pass a position where the ground affords greatly increased power of resistance — which power is equivalent to an increase of numbers to the defenders — it is desirable that the central force on arrival should find that position in its own control. To allot to the pass sufficient force for these purposes is entirely consistent with the one single exclusive purpose embodied in the constitution of that central force. The whole process of such an adjustment is dictated by a single exact thought, and so is essentially a combination.

The word "combination" suggests a thought and a warning, in which perhaps you may see the fad of a writer. In studying warfare, as in every other subject, do not despise words, nor be indifferent to the precision and fullness of their meaning. I dare say this talk about Compromise and Adjustment may have seemed twaddle or hairsplitting; but be sure that a man who thinks clearly will very soon want to speak clearly, and to have accurate words in which to express his thoughts. So to wish is mere commonplace

practical. If words are capable of two meanings, the hearer may get the wrong one of the two. Remember then that combination does not mean merely putting two or more things together, be those things qualities or actions. Combination means putting things so together that they no longer mean two things, — that is, a composite effect, — but one thing, a single effect. The difference is somewhat like that between gunpowder and nitroglycerine; a mechanical mixture and a chemical combination; and there results a like disparity of power. A force divided more or less equally among several passes is not a combination, for there is no oneness of effort. The same force stationed centrally, with minor divisions in the several passes as described, is a combination — one harmonious whole; one, not in their being only one part, but that the several parts are so related, and so subordinated to a single head, that they are practically and essentially one, possessing the unity of an organism.

It is worthy of your consideration whether the word compromise does not really convey to your minds an impression that, when you come to design a ship of war, you must be prepared to concede something on every quality, in order that each of the others may have its share. Granting, and I am not prepared to deny, that in effect each several quality must yield something, if only in order that its own effectiveness be insured, as in the case of the central defense force just cited, is it of no consequence that you approach the problem in the spirit of him who divided his force among several passes, rather than of him who recognizes a central conception to which all else is to minister? Take the armored cruiser; a fad, I admit, with myself. She is armored, and she is a cruiser; and what have you got? A ship to "lie in the line"? as our ancestors used to say. No, and Yes; that is to say, she may on a pinch, and at a risk which exceed her powers. A cruiser? Yes, and No;

for, in order to give her armor and armament which do not fit her for the line, you have given tonnage beyond what is needed for the speed and coal endurance proper to a cruiser. By giving this tonnage to armor and armament you have taken it from other uses; either from increasing her own speed and endurance, or from providing an additional cruiser. You have in her more cruiser than you ought to have, and less armored vessel; or else less cruiser and more armored ship. I do not call this a combination, though it is undoubtedly a compromise. You have put two things together, but they remain two, have not become one; and, considering the tonnage, you have neither as much armored ship, nor as much cruiser, as you ought to have. I do not say you have a useless ship. I do say you have not as useful a ship as, for the tonnage, you ought to have. Whether this opinion of one man is right or wrong, however, is a very small matter compared with the desirability of officers generally considering these subjects on proper lines of thought, and with proper instruments of expression; that is, with correct principles and correct phraseology.

As an illustration of what I am here saying, the two expressions, "Fortress Fleet" and "Fleet in Being," themselves give proof in their ultimate effect upon Russian practice and principle. Fortress Fleet was a dominant conception in Russian military and naval thought. I quote with some reserve, because from a daily newspaper,[1] but as probably accurate, and certainly characteristic of Russian theory, the following: "Before his departure from Bizerta for the Suez Canal, Admiral Wirenius, in command of the Russian squadron, remarked that the Russian plan was to make Port Arthur and Vladivostok the two most important arsenals in the empire, each having a fleet of corre-

[1] The Kobe *Chronicle*, February 25, 1904; an English newspaper published in Japan.

sponding strength," — corresponding, that is, to the fortress — "depending upon it as upon a base." The distribution would be a division in the face of the probable enemy, Japan, centrally situated, because the design has reference primarily to the fortress, not to naval efficiency. The conception is not wholly erroneous; if it were, the error would have been detected. It has an element of truth, and therein lies its greatest danger; the danger of half or quarter truths. A fleet *can* contribute to the welfare of coast fortresses; especially when the fortress is in a foreign possession of the nation. On the other hand, the Fleet-in-Being theory has also an element of truth, a very considerable element; and it has been before the naval public, explicitly, for so long a time that it is impossible it was not known in Russia. It was known and was appreciated. It had a strong following. The Russian Naval General Staff clamored for command of the sea; but in influence upon the Government, the responsible director and formulator of national policy, it did not possess due weight. Not having been adequately grasped, — whether from neglect, or because the opposite factor of Fortress Fleet was already in possession of men's minds, — it was never able to secure expression in the national plans. There was compromise, possibly; both things, Fleet in Being and Fortress Fleet, were attempted; but there was not adjustment. The fortress throughout reduced the fleet, as fleet, to insignificance in the national conceptions. What resulted was that at Port Arthur the country got neither a fortress fleet, for, except the guns mounted from it, the fleet contributed nothing to the defense of the place; nor yet a Fleet in Being, for it was never used as such.

It is interesting to observe that this predominant conception of a fortress fleet reflects national temperament; that is, national characteristics, national bias. For, for what does Fortress Fleet stand? For the defensive idea. For what

does Fleet in Being stand? For the offensive. In what kind of warfare has Russia most conspicuously distinguished herself? In defensive. She has had her Suvarof, doubtless; but in 1812, and in the Crimea, and now again, in 1904–1905, it is to the defensive that she has inclined. In virtue of her territorial bulk and vast population, she has, so to say, let the enemy hammer at her, sure of survival in virtue of mass. Militarily, Russia as a nation is not enterprising. She has an apathetic bias towards the defensive. She has not, as a matter of national, or governmental, decision, so grasped the idea of offense, nor, as a people, been so gripped by that idea, as to correct the natural propensity to defense, and to give to defense and offense their proper adjustment in national and military policy.

In these two well-known expressions, "Fortress Fleet" and "Fleet in Being," both current, and comparatively recent, we find ourselves therefore confronting the two old divisions of warfare, — defensive and offensive. We may expect these old friends to exhibit their well-known qualities and limitations in action; but, having recognized them under their new garb, we will also consider them under it, speaking not directly of offensive and defensive, but of Fortress Fleet and Fleet in Being, and endeavoring, first, to trace their influence in the Russian conduct.

The exceedingly tentative method by which the Russians accumulated in the Far East the naval force which they had there at the opening of the war, indicates of itself an inadequate conception, and an inadequate purpose, as to using the fleet. We do not know, probably the world never will know, the processes of reasoning which determined their actions. As in other cases, motive must be here inferred from acts; and the Russian acts, as well in assembling the fleet as in stationing it, and in using it, all go to indicate absence of purpose to use it offensively, and presence of purpose to devote it to the support of a fortress.

For, if it was meant to be employed offensively, if that motive was clearly formulated and distinctly dominant, it would have dictated the assembling of a force decidedly superior to that of the Japanese; which Russia was able to do, for she had the ships. Of course, the haphazard method, which caught two ships on the way out, might have been adopted through mere carelessness; but it would have been much less likely to occur had the purpose been to act offensively. If the primary purpose had been to fight the enemy's fleet, the need of superior force could not have been overlooked; and, when taken in connection with the subsequent naval conduct throughout, the absence of offensive intention with the fleet can justly be inferred.

A French naval officer, Lieutenant Ollivier, in an essay crowned by the Navy League of France, which I have found very instructive, remarks justly, "If the necessity has been foreseen of concentrating the permanent forces in case of war, such concentration should be effected while peace still lasts." This corresponds to the old strategic maxim that concentration, that is, the stationing the several bodies in such positions as to make mutual support certain, should take place beyond the enemy's power to strike any one of them separately. In other words, what we call the *distribution* of a navy, in peace, should conform to the most probable needs, if war should arise. This repeats Jomini's comment on the elaborate scheme of two army corps moving by separate routes, to unite near the enemy: "What pains to effect a junction at last which might perfectly well have been effected at first, and continued throughout the movement." Instead of this, the Russians having two fortresses, under the influence of their conception of a Fortress Fleet, divided their battle fleet into two bodies; the smaller of which was what Jomini calls a big detachment, which he qualifies as being at best — that is, when it *must* be made — an unavoidable evil. Hence arose the sub-

sequent requirement to unite the two, resulting in the twin disasters of August 10 and 14; in face of which there are those who would divide the United States fleet between the Atlantic and Pacific. This helps to reinforce the conclusion, from the universal experience of mankind, that principles are of decisive consequence upon conduct; the results appearing in places least expected, and where it requires some attention to trace them back to their origin in faulty principles. Incorrect principles, or disregard of correct principles, in this war, caused the stronger nation to be defeated by the weaker. The inefficient conduct of the war proceeded from defective grasp of principles.

Since these words were written, I have come across what seems conclusive evidence that the necessity for a fleet in these waters was foreseen and brought to the attention of the Russian Admiralty as early as 1896, nearly two years before the Russian occupation of Port Arthur (on March 27, 1898). In an article in the *Fortnightly Review* for May, 1910, page 819, "Why Russia went to war with Japan," vouched as the account of a person behind the scenes in Russia, occurs the following:

"In 1896, the Grand Duke Alexander Mikhailovitch presented a long memorandum setting forth the urgent need of creating a powerful navy in the waters of the Pacific, on the ground that, unless we held command of the sea, we could not hope to continue in lasting possession of the Siberian Railway to [as far as] the ocean. In this document, it was pointed out that in 1906 Japan's naval preparations, according to the program drawn up, would be completed; that it was manifest she was making ready to wage war against Russia, and that by 1903 we ought to be in a condition to meet every emergency. In the highest naval spheres this *exposé* failed to evoke a sympathetic response."

political, or rather international, literature. This incidental remark, in an article essentially political, not military, shows a government completely blind to the necessity of creating, and of transferring betimes from one national coast to another, a naval force that could have been so enlarged and transferred. It not only throws light on history, and on Russian methods, but is a warning to all military men that to be efficient as counsellors they must be familiar with international relations as well as with military principles.

The very faulty conception, expressed in the phrase "Fortress Fleet," not only caused the assembling of a fleet characteristically defensive in numbers, but led to the stationing of that fleet in a faulty position, dictated by the idea of supporting thus a cherished fortress. I find myself confronted here with a past erroneous conclusion of my own, which, however, I could scarcely have reached had I been in the Russian counsels; for I would not then have believed, as I did, that Vladivostok was hopelessly closed by ice during winter, thus paralyzing movement. This is not the case; the Russian ice-breakers were competent to assure free exit. Not knowing this, and assuming that the fleet should be used offensively, as I still do, it appeared to me that Port Arthur was correctly chosen; for there it certainly could get out, and if it also incidentally could aid in the defense, without injury to its offensive functions, that was so much gain. Actually, however, Vladivostok was available; and in its situation, in its two exits, as well as in general navigational facilities, it possessed distinct advantages for a fleet intended for its proper office of offense.

Why then was the fleet stationed in Port Arthur? Because, expecting the Japanese attack to fall upon Port Arthur, the purpose of the Russian authorities was not to use the fleet offensively against the enemy's navy, but

defensively as a fortress fleet; defending the fortress by defensive action, awaiting attack, not making it. That is, the function of the fortress was conceived as defensive chiefly, and not as offensive. Later, I hope to show that the purpose, the *raison d'être*, of a coast fortress is in itself offensive; because it exists chiefly for the purpose of sheltering a fleet, and keeping it fit to act offensively. For the present, waiving the point, it will be sufficient to note that the conception of the fleet by the Russians, that it should act only in defense, led necessarily to imperfect action even in that respect. The Port Arthur division virtually never acted offensively, even locally. An observer on the spot says: "In the disposition of their destroyers, the authorities did not seem disposed to give them a free hand, or to allow them to take any chances." And again, "The torpedo boats were never sent out with the aim of attacking Japanese ships, or transports. If out, and attacked, they fought, but they did not go out for the purpose of attacking, although they would to cover an army flank." These two actions define the rôle indicated by the expression, "Fortress Fleet." The Japanese expressed surprise that no attempt by scouting was made to ascertain their naval base, which was also the landing place of their army; and, although the sinking of the two battleships on May 15 was seen from Port Arthur, no effort was made to improve such a moment of success, and of demoralization to the enemy, although there were twenty-one destroyers at Port Arthur; sixteen of which were under steam and outside. So, at the very last moment, the fleet held on to its defensive rôle; going out only when already damaged by enemy's shells, and then not to fight but to fly.

It is a curious commentary upon this course of action, that, as far as any accounts that have come under my eye show, the fleet contributed nothing to the defense of the fortress beyond landing guns, and, as the final death strug-

gle approached, using their batteries in support of those of the fortress; but the most extreme theorist would scarcely advocate such an end as the object of maintaining a fleet. The same guns would be better emplaced on shore. As far as defense went, the Russian Port Arthur fleet might as well have been at Cronstadt throughout. Indeed, better; for then it would have accompanied Rozhestvensky in concentrated numbers, and the whole Russian navy there assembled, in force far superior, would have been a threat to the Japanese command of the sea much more effective, as a defense to Port Arthur, than was the presence of part of that fleet in the port itself.

The Russian fleet in the Far East, assembled as to the main body in Port Arthur, by its mere presence under the conditions announced that it was there to serve the fortress, to which it was subsidiary. Concentrated at Vladivostok, to one side of the theater of war, and flanking the enemy's line of communications to that which must be the chief scene of operations, it would have been a clear evident declaration that the fortress was subsidiary to the ships; that its chief value in the national military scheme was to shelter, and to afford repairs, in short, to maintain in efficiency, a body which meant to go out to fight, and with a definite object. The hapless Rozhestvensky gave voice to this fact in an expression which I have found attributed to him before the fatal battle at Tsushima: that, if twenty only of the numbers under his command reached Vladivostok, the Japanese communications would be seriously endangered. This is clear "Fleet in Being" theory, and quite undiluted; for it expresses the extreme view that the presence of a strong force, even though inferior, near the scene of operations, will produce a momentous effect upon the enemy's action. The extreme school has gone so far as to argue that it will stop an expedition; or should do so, if the enemy be wise. I have for years contended against

this view as unsound; as shown to be so historically. Such a "fleet in being," inferior, should not be accepted by an enemy as a sufficient deterrent under ordinary circumstances. It has not been in the past, and the Japanese did not so accept it. The Russian "fleet in being," in Port Arthur, did not stop their transportation; although they recognized danger from it, and consistently took every step in their power to neutralize it. Their operations throughout were directed consistently to this end. The first partially successful torpedo attack; the attempts to block the harbor by sinking vessels; the distant bombardments; the mines laid outside; and the early institution and persistence in the siege operations,—all had but one end, the destruction of the fleet, in being, within; but, for all that, that fleet did not arrest the transport of the Japanese army.

These two simultaneous operations, the transport of troops despite the fleet in being, and the persevering effort at the same time to destroy it — or neutralize it — illustrate what I have called adjustment between opposite considerations. The danger from the fleet in being is recognized, but so also is the danger in delaying the initiation of the land campaign. The Fleet in Being School would condemn the transportation, so long as the Port Arthur fleet existed. It actually did so condemn it. The London *Times*, which is, or then was, under the influence of this school, published six weeks before the war began a summary of the situation, by naval and military correspondents, in which appears this statement: "With a hostile fleet behind the guns at Port Arthur, the Japanese could hardly venture to send troops into the Yellow Sea." And again, four weeks later: "It is obvious that, until the Russian ships are sunk, captured, or shut up in their ports with their wings effectually clipped, there can be no security for the sea communications of an expeditionary force."

These are just as clear illustrations of the exaggeration inherent in the Fleet in Being theory, which assumes the deterrent influence of an offensive threatened by inferior force, as the conduct of the Russian naval operations was of the inefficiency latent in their theory of Fortress Fleet.

If security meant the security of peace, these "Fleet-in-Being" statements could be accepted; but military security is an entirely different thing; and we know that, coincidently with the first torpedo attack, before its result could be known, an expeditionary Japanese force was sent into the Yellow Sea to Chemulpo, and that it rapidly received reinforcements to the estimated number of fifty or sixty thousand. The enterprise in Manchuria, the landing of troops west of the mouth of the Yalu, was delayed for some time — two months, more or less. What the reason of that delay, and what determined the moment of beginning, I do not know; but we do know, not only that it was made in face of four Russian battleships within Port Arthur, but that it continued in face of the increase of their number to six by the repair of those damaged in the first torpedo attack. As early as May 31, it was known in Tokyo that the damaged ships were nearly ready for the sortie, which they actually made on June 23.

It is doubtless open to say that, though the Japanese did thus venture, they ought not to have done so. Note therefore that the Japanese were perfectly alive to the risks run. From the first they were exceedingly careful of their battleships, knowing that on them depended the communications of their army. The fact was noted early in the war by observers on the spot. This shows that they recognized the full menace of all the conditions of the Russian fleet in Port Arthur, also of the one in the Baltic, and of the danger to their communications. Nevertheless, though realizing these various dangers from the hostile "fleets in being," they ventured.

About the middle of March, that is, six weeks after the war began, a report, partly believed by the Japanese authorities, came in that the Port Arthur ships had escaped in a snow storm, on March 11. It is reported that all transportation of troops stopped for some ten days. It may be remembered that in our war with Spain, a very similar report, from two different and competent witnesses, arrested the movement of Shafter's army from Key West until it could be verified. In the case of the Japanese, as in our own, the incident illustrates the possible dangers from a "Fleet in Being." In neither report was there an evident impossibility. Had either proved true the momentary danger to communications is evident; but the danger is one the chance of which has to be taken. As Napoleon said, War cannot be made without running risks. The condition that an enemy's fleet watched in port may get out, and may do damage, is entirely different from the fact that it has gotten out. The possibility is not a sufficient reason for stopping transportation; the actual fact is sufficient for taking particular precautions, adjusting dispositions to the new conditions, as was done by ourselves and by the Japanese in the circumstances. The case is wholly different if the enemy has a fleet equal or superior; for then he is entirely master of his movement, does not depend upon evasion for keeping the sea, and communications in such case are in danger, not merely of temporary disarrangement but of permanent destruction. No special warning is needed to know this; the note of the "Fleet in Being" School is insistence on the paralyzing effect of an *inferior* fleet.

As far as my knowledge of naval history goes experience does not indorse the opinion, which certainly traverses the practice of land warfare. There it frequently happens that a general contents himself with simply watching with a competent detachment a fortress which menaces his com-

munications; and I believe the Japanese were fully justified in their course, not by their eventual success, but by the actual conditions they had before them. They adjusted their action to the conditions; not by ignoring the fleet in being, nor yet by abandoning their invasion, but by so watching the fleet as to be reasonably secure — in a military sense — that it could not do any fatal injury. Communications cannot be made inviolable; nor need they be, to be secure. "Good partisan troops," says Jomini, "will always trouble communications, even the most favorably situated;" and the operations of an inferior fleet in being, depending for effectiveness upon its sudden furtive action, are merely those of a partisan body, raiding.

The Japanese had one very unpleasant experience of this kind. The Russian Vladivostok squadron, which you will remember consisted of only three armored cruisers, on one of its raids in the Sea of Japan, captured two or three transports, on board one of which was a train of siege artillery. The loss of this is believed to have prolonged the siege of Port Arthur; thus protracting for the Japanese that anxious period in which the Baltic fleet might have arrived, and did not. In the same way, the siege of Acre by Napoleon in 1799 was prolonged, and subsequently failed, by exactly the same occurrence, the capture of the whole siege train by a British cruiser; the siege therefore having to be conducted with field pieces. It can hardly be maintained, however, that either of these untoward incidents would warrant the stoppage of all transportation until an enemy's inferior fleet in being had been destroyed. If so, Bonaparte should have waited in Egypt till he knew his siege train had arrived before Acre, and Japan have limited her transportation to that necessary for the reduction of Port Arthur, that being the only means by which the enemy's fleet was, or could be, reached.

I have pointed out, discursively and at large, the effect

which the false principle summed up in the phrase "Fortress Fleet" produced upon the Russian Government: (1) In the manner of assembling its fleet in the Far East, and (2) by its choice of the point, or rather points, of assembly, — of the positions in which the fleet was stationed. These two acts are part of the evidence, from which, in default of more explicit testimony, outsiders have to infer the motive, the principle, by which the Government, through its responsible representatives, was actuated. To infer thus intentions from acts, principles from conduct, is perfectly legitimate; especially where there is strong corroborative evidence in the statement that the general principle does, or did, prevail in Russia, although we have not the same positive knowledge as to its influence in the particular case under consideration.

The most convincing proof, however, of the general purpose of the Russian authorities, and of the habit of naval thought which underlay that purpose, is to be found in neither of the two circumstances just noted. The method of assembling the fleet, its numbers when assembled, and the position, station, in which it was assembled, are all strong indications of erroneous military principles. If we had no other, they might suffice for a verdict; but the third consideration, of the manner in which the fleet at Port Arthur was used, is by itself so conclusive of faulty underlying conceptions, that the others, however strong in themselves, become merely cumulative.

I pass over, of course, the exposure to torpedo surprise which resulted in the immediate loss of two battleships for a prolonged period at the opening of the war. However censurable as carelessness, this proves nothing as to intentions. After this mishap, inasmuch as it was immediately certain to the Russians that the injured vessels could be so far repaired as to take their places again in the line, it was proper, and even imperative, not to seek action until they

were again ready. Also, the propitious time for battle must depend always upon various considerations; and it is not necessary to our present inquiry to consider nicely just when that time was. It might very well be a few weeks sooner or later; but we have to observe that there does not seem to have been any clearly defined purpose that any such time — that is, time for fighting — should be found. In the event, the Russian fleet left Port Arthur, as far as appears, merely because it was clear that the anchorage would soon become untenable. That is, so long as possible, the fleet was kept tied to the fortress, a vague possible shadow of help to it, a Fortress Fleet, apparently without a thought of offensive action against the Japanese "Fleet in Being" at hand, outside, upon the efficiency of which depended the issue of the war.

Nor is this all. When it became evident that the fleet could not remain in Port Arthur until Rozhestvensky arrived, that to stay would entail the destruction which ultimately did befall, the decision reached was simply, and apparently somewhat vaguely, to transfer the fleet to another fortress. Now, note, I do not condemn the decision, evidently reached, to go to Vladivostok; for that was essentially to make a junction with the strong detachment in that port, of three fine armored cruisers, before accepting battle. If that could be done, it was the admiral's duty not to fight till he had thus united his whole force; and it was right to embrace even the barest chance of getting to Vladivostok with the main body uninjured, and after the junction to deliver battle. That a junction was intended is evident, from the fact that the Vladivostok vessels were ordered to move to the Straits of Korea. Whether this subordinate movement was judicious or not, considering that the Japanese division of four armored cruisers was known to be in the straits, is matter of fair difference of opinion. My own is, that, seeing the great improbability

of either division escaping action, under the circumstances, it would have been better to keep the Vladivostok ships in their own port, so that, if the Port Arthur division got through, it would find them uninjured. The off chance, that both divisions might escape action, and might join in the open sea, though very desirable if effected, was to my mind too remote, too improbable, to justify the attempt. As it was, we after the event know there was very little chance, and that actually both divisions had to fight, separately, and very far apart.

The purpose to take the Port Arthur division to Vladivostok, therefore, was in my opinion justifiable; but the conduct of the attempt shows conclusively that there underlay it no adjustment of purpose to the actual conditions, summarized as these were in the existence and presence of the somewhat superior Japanese fleet, the central decisive factor in the war. If I were looking for an apt illustration of the distinction between compromise, and that which I have called adjustment, I would point to this Russian movement. The admiral had before him two things, two conditions, both desirable, both possible, opposed one to the other at the moment, but each conducive to the end of war; that is, conducive to success, ultimate success. (1) There was getting to Vladivostok, thus concentrating his command, and by means of the facilities of the port putting it into the best possible conditions for battle. (2) Opposed to this, as interfering with it, — as the demand for speed in ships interferes with the requirement for armament, — and yet necessarily to be embraced in any plan of procedure, was the enemy's fleet, known by experience to be near by, and believed to be superior. To damage it, if encountered, to reduce it to the lowest possible efficiency, so as to obtain the best possible chance for Russia's reserve navy, was evidently incumbent.

The plan of the sortie should have embraced clearly both

contingencies, the desired escape and the possible battle, distinguishing clearly between them, recognizing their differing requirements, and assigning to each the mode of action that each demanded, under such probable contingencies as could be foreseen. If the event offered strong probability of escape, practically uninjured, then there should be no fighting that could be avoided. Should battle become unavoidable, as, for instance, by one ship being so injured as to be unable to keep up, then all thought of escape should be abandoned, and the whole fleet, as one body, throw itself upon the enemy, determined that, if defeat ensued, there should be no fight left in the victor.

Nelson, though less dramatic in expression, was as fruitful in phrases as Napoleon, and he has supplied two that exactly fitted the Russian opportunity. The first, reiterated by him on more than one occasion of expected meeting with a superior fleet, was: "If we get close alongside, by the time they have beaten our fleet soundly, they will do us no harm this year." Translated into Russian, this means, "By the time the Japanese have beaten the Port Arthur fleet, they will be in no condition for six months to injure Rozhestvensky." The second of Nelson's sayings, more familiar, was, "In case signals cannot be understood, no captain can do very wrong if he places his ship alongside that of an enemy." You will observe that both the opposite lines of action suggested for the Russians have the one motive — the destruction of the Japanese fleet. There is in neither a compromise, between escape and fighting; partial escape and partial action; concession to each desired object. The one motive is the destruction of the enemy; but there is adjustment, due to the existence of the strong Vladivostok detachment. If it can be joined before fighting, good; if not, the fighting must be characterized by the same desperateness, as if the junction had been effected. It would be no adjustment, but a bare com-

promise, so to fight as to escape with part; because the part thus saved is unequal to contend with the enemy, and the way for the Baltic fleet has not been cleared.

The instructions of the Russian admiral should have set forth these considerations so clearly, and prescribed action so positively, as to have made impossible what actually occurred, through the sole, though serious, accident of the coincident disabling of the flagship and the death of the commander-in-chief. If the second in command and the captains had received, as they should, clear instructions, that, failing escape without battle, the fate of the war — to quote Togo before Tsushima — depended upon this action, it is to me inconceivable that they could have slunk back to their fortress as they did. No one imagines cowardice; but also no man's imagination could have been equal to conceiving beforehand such utterly vicious misconception of what the duty of the navy was. I doubt, myself, if the result would have been materially different, had the admiral lived and the flagship not been disabled. The spirit of a clear-headed resolute commander-in-chief does not expire at the instant that his body dies. If the Russian fleet, to a ship, had gone down in such an attempt, Manchuria might have been lost; but it would have been well lost with such a priceless gain in *morale* to the Russian navy, and, what was more immediately to the point, the Japanese fleet could not but have suffered to the extent of at least temporary disability.

I shall pass over the action of August 14 between Kamimura's division of four armored cruisers, and the Russian three from Vladivostok. The rôle of these three in the general strategic movement, the one aim of which should have been to destroy the Japanese navy, was a minor detail, to be adjusted to the action of the main body at Port Arthur. I have already indicated my own preference for keeping them at Vladivostok, making the junction

there. Junction was the one first thing. To effect it, the Port Arthur fleet had to take its risk; but there was no sufficient reason compelling a similar hazard for the smaller body. It was unequal to Kamimura, and had few chances of passing him unseen; fewer still of joining its own fleet. Atmospheric conditions had to be assumed equally favorable to both parties; therefore the luck that might have given the go-by to the enemy was equally likely to cause the friend to be missed. The chance against the junction therefore, is the chance of meeting Kamimura, plus the chance of missing the friend. Further, assuming the Russians and Japanese at Port Arthur to be equal, calling each therefore six, the approximate numbers, it is a simple calculation to state that if the Vladivostok division met Kamimura, alone, as it did, the odds would be as 4 to 3 against the Russians; whereas, had a junction in Vladivostok been effected the numerical odds thenceforth between the two combined bodies would be 10 to 9, — a much nearer approach to equality; and the larger the main bodies the less the inequality after the detachments have joined. As a matter of probable calculation, I think all goes to show that Vladivostok was the point for uniting; and this coincides with the time-honored maxim that it is not advisable for two separated bodies to seek their point of concentration inside the enemy's lines.

CHAPTER XIV

DISCUSSION OF THE RUSSO-JAPANESE WAR

(Concluded)

THE conduct and actions of Admiral Rozhestvensky, when leading to its final experiences the Russian forlorn hope under his command, should be regarded from the same point of view, of singleness of aim, that has been applied to the transactions of the Port Arthur fleet. This requirement, singleness of conception and aim, is the standard by which to measure the various details of his arrangements for the last stage of the voyage; that from the Saddles, off Shanghai, to Vladivostok, in the course of which the possibility became imminent of meeting the enemy on ground of his own choosing.

The fleet under Rozhestvensky may be assumed to have entered the strategic area of the war when the vessels anchored off the Saddle Islands, near the mouth of the Yang-tse-Kiang.[1] It is true that possible operations were open to the Japanese before that; and they did take certain precautionary measures, such as sending a squadron of observation as far even as Singapore, and laying mines around the Pescadores Islands, in the Formosa Channel. But the decision of Togo to concentrate his armored ships at the Straits of Korea, and the absence of any attempt by him to harass the Russians before that point was reached, make it proper to confine consideration to Rozhestvensky's course after anchoring at those islands, which are within easy steaming distance of Vladivostok. He was there, so

[1] See map facing page 426.

to say, on one edge of the theater of active war, his destined port on the other.

I think that, as time passes, history will take a more indulgent view of the procedure of this unfortunate admiral; not so much by minimizing the undoubted errors of his last four days of command, as in recognizing the arduous task he had accomplished up to that time, and also, very especially, the prepossession of his intellect, fostered by the Russian ideals, and intensified by the long strain of exigency constituted by a voyage such as his from the Baltic. During this he had had no resources on which to depend, except the benevolent neutrality of other nations, which could be extended only by straining international obligations. To this burden of care is to be added the knowledge of the unsatisfactory condition of his own squadron, and that there was in the East no reinforcement, except the two surviving armored cruisers at Vladivostok.

Justice demands the combined recollection of these factors, extenuating the series of grave faults he proceeded now to commit — if my estimate of his conduct is correct; but, granting the faults, it is yet more essential, in weighing them, to bear in mind the traditions of his service as well as the difficult circumstances confronting him.

To these inferential considerations must also be added certain explicit statements by Captain Semenoff, of the Russian navy, in his book, "Rasplata."

First: As regards the transports following the fleet and being present at the moment of encountering the enemy, an incident sure to entail tactical embarrassment, Semenoff says:

"A not inconsiderable difficulty was caused by the anxious warnings received [before leaving Kamranh Bay, in French Indo-China] from the Naval General Staff; we were not to be a burden upon the poorly equipped and armed port of Vladivostok, and not to count on supplies by

the Siberian Railway. On the one side the most elementary of tactical maxims bade us go into battle as little hampered as possible, and, as a matter of course, not to take with us any fleet auxiliaries which would interfere with our free movements. On the other hand, we were bound to take into account these amiable communications.

"A compromise had to be arrived at. The admiral decided as follows: The warships were to take on board as much in the way of stores of all kinds as the space provided for their reception on board would hold. The auxiliary steamers, the three largest and best, were to embark the largest possible amounts of articles most needed. These three and the Kamchatka were to follow the fleet and share its fate in the attempt to reach Vladivostok."

Second: With reference to the amount of coal taken on board the ships of war, Semenoff makes the following mention:

"May 23. At 5.30 A.M. stopped engines and started coaling. Ships were informed that this will probably be the last time of coaling. We were therefore to do our best to have still the normal stowage in our bunkers on the morning of May 26."

To these words he appends a foot note:

"How impudently those lied who pretended that the ships had been overloaded with coal during the battle."

The effect of the statements in these quotations is to transfer a certain part of the responsibility in Rozhestvensky's decision to carry to Vladivostok the greatest possible quantity of stores; of which coal is one item. The orders from St. Petersburg, however, did not compel him to have the transports in company with the fleet. The Government prescribed an object, the method of accomplishing which was for the admiral to determine; and as a matter of fact the particular number of transports to proceed, which he did settle, was as much an exercise of his own discretion, as was their relation of position to his

fleet, either on the voyage towards Vladivostok or at the moment of meeting the enemy.

As regards the loading the warships with coal, Semenoff's statement that they were not overloaded was so contrary to all other accounts that I addressed a question to the Office of Naval Intelligence. In reply, the Office sent me two quotations from the defense of Admiral Nebogatoff, during his court-martial. It is not necessary to give these in full. They confirm the information already published. One sentence runs, "According to our estimate we had at the beginning of the battle coal enough for about three thousand miles, while the distance to Vladivostok through Tsushima Straits was less than nine hundred miles." There seems reason to believe that Semenoff is not always strictly exact in his statements. He has since died; but concern is with his trustworthiness as an accurate witness, not with his personal truthfulness.

The effect of such admonitions upon a general officer, situated as Rozhestvensky was, is undoubtedly to qualify his responsibility, and thus in a degree to obscure his personality; so that in some measure the criticisms to be addressed to the ensuing operations are rather to Russia than to the Russian admiral. It seems fit to draw attention in passing to the close inter-connection which usually exists between the different parts of any scheme of national defense, or of any plan of operations. While Rozhestvensky was painfully but successfully leading an armored fleet with transports round the Cape of Good Hope, — three years before our own battle fleet passed the Straits of Magellan, — the inadequate development of the Siberian Railway and the mismanagement of the Port Arthur division were preparing the painful dilemma he met at the Saddles. Nothing is more essential for an officer in command anywhere, be it of a single ship or of the smallest detachment of seamen, than to remember that his own inattention to

the general situation, or his inefficient action, may fatally embarrass larger interests.

On one occasion during the Spanish War the Navy Department was seriously harassed by inability to locate a cruiser which was urgently needed, but the commander of which had indulged himself in independent single action without precaution against the contingency of being required for the general operations.

The same considerations hold as to a surrender. No extreme, short of absolute incapacity to resist, justifies surrender, unless it is evident that no other interest is compromised; and that practically is never the case. Rozhestvensky was defeated on August 10, before Port Arthur, by the inefficient action of the Port Arthur division, as really, though not as finally, as off Tsushima nine months later.

Recurring now to Rozhestvensky's own proceedings: From the beginning of the war until his arrival at the Saddles the determining factor had not changed, although it had been somewhat modified in application. Everything depended upon the command of the sea; and command of the sea could be obtained only by the destruction of the enemy's fleet. That destruction, again, could be effected only by battle; by the cannon; by bringing the fleets into collision under the circumstances of greatest advantage for the party seeking the encounter. For the Russian fleet under Rozhestvensky this advantage meant necessarily, if possible, access to a navy yard first, in order that the tactical qualities of each ship, its speed and maneuvering power, with all the factors upon which these depend, machinery, boilers, and clean hulls, should be realized to the utmost. This the Japanese had had time to do; the culpable mismanagement of the Russian Port Arthur division having caused them no disabling losses. There could be no question therefore that Rozhestvensky's first object should be

to reach Vladivostok without fighting, in order that afterward he might fight with the most chances in his favor. Besides, he would there join the two remaining armored cruisers; no despicable reinforcement to his rather scratch lot of vessels.

In characteristic features therefore Rozhestvensky's problem was precisely the same as that of the Port Arthur division on August 10, nine months earlier; and he had before him its experience, a factor additional for judging what his course should be. To escape, if he could, for the moment; to fight at once, if he must; but in no case, by double-mindedness, to fall between these two stools, as the Port Arthur squadron had by the hesitating frame of mind which breeds compromise. Both contingencies — escape and battle — were so far possible that both must be provided for in the plan; but as unity of conception had required of the Port Arthur division the purpose, if it must fight, to fight with the desperate resolve that the enemy should suffer to the utmost, in order so to clear the field for the reserve coming under Rozhestvensky; so the same unity of conception demanded of that admiral that, if he could not escape, if he must fight before getting the benefit of Vladivostok, his ships at the moment of engagement should be in the very best condition, tactically, that he could insure, and the enemy deprived at least of the advantage of knowing beforehand his dispositions. There were no reserves now; the whole fortune of Russia was in his hands.

Where the conditions of war are such that a solution cannot be reached without battle, this imposes as the strategic aim to force battle at the time, and under the conditions, most favorable, tactically, to yourself. In face of this perfectly clear truth, having only a bare thousand miles to go, the admiral proceeded to load his ships down with coal; carried, it is said, even in the admiral's cabin. Needless to say that this procedure militated against escape, as actually

as it did against speed and maneuvering power; that is, against tactical efficiency. Moreover, it imposed upon the vessels additional disadvantage for the day of battle; for it further submerged the armor belts, already too low in the water through faulty design, and exposed the superstructures to increased danger of fire by crowding them with combustibles. One French writer asserts that the loss of the battle was due to the fires started in these coal traps by the Japanese intermediate batteries. I doubt whether, among so many causes, the result can be ascribed to one alone; but certainly the tendency would be as stated.

It should ever be the aim of a commander-in-chief to reach his result without wastefulness, with a minimum expenditure of men and material; although, as in all cases of opposing considerations, there must be no attempt to strike a balance, a compromise, in the vain hope to satisfy both considerations — the result and the economy. If the object is not worth the expenditure, spend nothing. If it is worth while, and yet can be equally attained by a less expenditure, economize; but do not economize any amount, however great and desirable, necessary to put the attainment of the object beyond all possibility of failure, or even of completest success. Rozhestvensky's management of the preparation for meeting the enemy appears to me as a whole so blundering, that I am forced to the conclusion he had never clearly thought out his strategic problem and settled down in consequence to a single-minded decision. The excessive provision of coal is an exemplification of economizing material at the expense of lessening the chances to attain the first and all essential object, victory. He had become so obsessed with the question of supplies, and of reaching Vladivostok, that neither escape nor battle clearly dominated in his mind. Rather, the two contended throughout for mastery, making him essentially a double-minded man, even at the moment when every hope of escape had disappeared.

I cannot help thinking that to this divided frame of mind there contributed, not only the national prepossession in favor of a Fortress Fleet, which could not but influence an average officer even though he himself did not share it, but also the exaggerated form of the theory of the Fleet in Being. If a part of the fleet escaped to Vladivostok it would be so much gain, — a fleet in being. Consequently, the resolve of *combat à outrance*, which gave the only possibility of a decisive issue, encountered the thought of escape and was qualified by it. If this be so, again economy of material, in this instance by saving a few ships, in itself a praiseworthy object, militated against and prevented the exclusiveness of purpose essential to great undertakings and to great successes; the result being a compromise, a sacrifice of the principal to the accessory. According to a report of Rozhestvensky's words, published some days before the battle, he cherished the belief that if only a part of his fleet got to Vladivostok, it would exert a serious control over the Japanese communications and so affect the general war. Yet it is evident that such diminished force could not change the issue, though it might partially affect procedure — increase the enemy's precautions; but, unless the whole fleet escaped, to reinforce itself at Vladivostok and fight another day under better conditions, no decisive effect on the war could be produced by the Russian navy. If he must fight, — and sooner or later he must, — that moment and that issue should be obscured by no looking to escape, or to provision of supplies in the future. The chances doubtless were against success; but no success at all was possible except in the resolve to discard every thought save that of destroying now the enemy's fleet.

Criticism here is another case of inferring intentions from actions; but, when the various parts of Rozhestvensky's conduct are taken together, the inference is nearly irresistible that the exaggerated estimate of the

influence of an inferior fleet in being possessed his imagination. Besides the excessive coal stowage, he took with him a train of transports, a notorious source of tactical embarrassment in battle, though doubtless equally a source of refitment, if he got them to Vladivostok; and there is no evidence of any attempt at advanced scouting on his own part, or of driving off, as he might have done, the Japanese scouts which showed up; the result being that Togo knew all about his dispositions, and he knew nothing about Togo's until he saw the enemy's main body.

Now I say, that, while all this was bad management in the face of the enemy, and in so far bad tactics, the bad tactics issued from an error of strategy; and the error in strategy was due to the lack of unity of conception, of that exclusiveness of purpose, which is the essence of strategy, and which subordinates, adjusts, all other factors and considerations to the one exclusive aim. While writing these pages, I came across a few lines by one of the first of German philosophical historians, Ranke, in one of his greatest works, "England in the Seventeenth Century." They apply to policy, but policy is twin brother to strategy. Permit me to quote them:

"Why did William III. get the better of James II. in Ireland? Because he always kept his one great idea before his eyes, amid the many perplexing circumstances which surrounded him. The decision which he displayed at every moment rested upon the fact that he had *only one end*, and that the one *imposed by the course of things*."

Apply this to Rozhestvensky. The one end imposed on him by the course of things was the destruction of the Japanese fleet, which comprised every armored vessel Japan could possibly muster for that war. Togo's signal before the battle recognized this one end, and there was no reason why his opponent should not have recognized it equally. To reach Vladivostok was only a means to that end; an

object most important, because, if attained, it would put the Russians in the best possible condition for battle. But this by no means superseded the one necessary aim, — battle. More, it did not even postpone that aim, as a matter of immediate consideration and preparation; for, though escape through to Vladivostok might be possible, it was not certain. It was not even probable, under all the conditions. Therefore, while every forethought and care should have been to effect escape, if possible, they should have been accompanied with the clear decision that, should battle be forced, the fighting should have been qualified by no thought of escape, and the fleet, like a ship cleared for action, should have been stripped of all fleet encumbrances from the moment of leaving the Saddles. A fleet is half beaten already when it goes into battle with one eye upon something else than fighting.

If Rozhestvensky had recognized these facts, in their due importance and proportion, and had been convinced that battle was his one aim, and that there was at least a very real possibility that he could not postpone it till after Vladivostok, it seems to me he must have reasoned thus: I must have coal enough to reach Vladivostok, on a reasonable calculation of the distance, and of the expenditures of the ships; both which were known. To this amount add a fair margin of safety. This total should be carried for the purpose of escape, if feasible; with perhaps an addition sufficient to last during battle, with funnels pierced, which was a likely accident. Again, there is for each ship a draft of water which best meets her maneuvering needs. The chances are that the enemy will await us either in the narrower part of the sea, or near his navy yards. As there is one position, that in the Straits of Korea, which favors both these objects, it is there I will probably have to fight, if at all. Therefore, as far as possible, the coal carried by the fleet on starting should be such that consumption up

to the moment of reaching the straits will put them in their best tactical trim. The coal supply needed to reach Vladivostok is thus adjusted to the exigencies of battle.

Then as regards the transports. For the moment, on this last fateful stretch, they are absolutely of no consequence as affecting results. The adjustment of them, to the end of the battle, is to dismiss them out of mind and presence. If beaten, the loss of them will not be of the slightest consequence to Russia; if successful, they can be summoned from an appointed rendezvous, and escorted to a destination under such protection as may then seem expedient. An Austrian officer has suggested that if the whole body had weighed together, and at night had separated, the supply vessels proceeding under convoy by the east of Japan might have escaped notice; or, if seen, this report might have perplexed Togo, rather than enlightened him. Upon the suggestion I make no comment, other than that it would have been one way of counting out the supply ships.

The imminency of the occasion should have drawn, and did draw, all Japan's fighting force to the Straits of Korea, an element for Rozhestvensky's consideration. According to Semenoff the auxiliary steamers Terek and Kuban were sent off the east coast expressly to draw attention, but met no one, and their presence was unknown to the Japanese.

I am not disposed to question, or to doubt, that *if* the Russian squadron had escaped Togo, and *if* the separated supply train had been intercepted, it would have been very embarrassing to the ships of war refitting at Vladivostok. Nor do I question that, in case of such escape, the coal remaining in consequence of the deck loads taken would have been of much value for future operations. The more real and the greater those distracting considerations, like those of William III. in Ireland, the more do they throw into relief the greatness, as well as the necessity, of subor-

dinating them to the one thing needful, namely, to be ready to the utmost on the day of battle. They illustrate, too, how misleading is the disposition to compromise, to concede something all around; to straddle the two horses, escape and battle.

Rozhestvensky's course was a compromise, a mix-up of escape and fighting; a strategic blunder to begin with, in not concentrating attention on the one needful thing clearly indicated by the course of events, and hence resulting necessarily in a series of blunders, which comprehensively may be called tactical. They all hang together, as the results of a frame of mind; the overloading with coal, the increased danger of fire therefrom, the submersion of the armor belts, the loss of speed and tactical capacity, the neglect of scouting, the company of the transports, — each of which is a tactical error, — all proceed from the failure to observe that the one governing consideration of strategy, in this war, was a naval battle under the most favorable conditions. It is the repetition of the mistakes of the Port Arthur division. When it becomes clearly imminent that one may have to fight under conditions less favorable than one would desire, conditions are changed; but there is no change of the principles involved. Vladivostok reached, the principle would have required the utmost preparation the yard offered, in the least possible time, so as to be the most fit possible to fight. At the Saddles, the same fitness required the dismissal from influence upon conduct of all thought of Vladivostok, and of supplies there, so far as such thought might modify the preparation for probable battle. It seems very probable that the defective conceptions deducible from Rozhestvensky's conduct were emphasized and reinforced by the heavy preoccupations about supplies, necessarily incidental to his anxious outward voyage. His mind and *morale* had got a twist, a permanent set, from which they could not recover.

Let us close here with the encomium which Lanfrey, a hostile critic, passes upon the conduct of Napoleon, the great master of strategy, in the interval between the disaster of Essling and the victory of Wagram:

"Never had the maxim of sacrificing the accessory to the principal, of which Napoleon's military conceptions afford so many admirable examples, and which is true in every art, been applied with more activity and fitness. The complications which he most feared" — the perplexities, let me interject, of William III. and of Rozhestvensky's concern about supplies — "were to him for the moment as though they did not exist. No secondary event had power to draw him off from the great task which he had primarily assigned to himself."

Briefly, you will perceive that there is a concentration of purpose, for conduct, as well as a concentration of numbers, for action.

Taken as a whole, the naval strategy of the Japanese during this war was marked by that accuracy of diagnosis, concentration of purpose, and steadiness of conduct, which were so strikingly wanting in their opponents. I propose only a running commentary upon the more salient features; and in attempting this I intend to lay weight particularly upon the perplexing and harassing circumstances under which they labored, just because amid them they held fast to correct conceptions, despite all temptations to waver. It is particularly necessary thus to note their difficulties; for in regarding a series of successes, such as theirs, we are prone to infer qualities so extraordinary as to be almost superhuman, and thus, in vague admiration, to lose sight of the useful commonplace instruction. Much of the comment of the past five years has attributed to the Japanese an extravagance of excellence over all other fighters, which tends even to deprive their leaders of some of their due credit. In reading for these lectures, I have been con-

tinually reminded, somewhat amusingly, of certain words in the Bible, touching a similar prevalent impression in an olden time: "Now the Egyptians are men, and not God; and their horses flesh, and not spirit."

One of the first remarks that fixed my attention was that of an observer on the spot at the very beginning of the war: "The Japanese are terribly influenced by the necessity of preserving their battleships." This was nearly two months before the Hatsuse and Yashima were sunk by mines, on the same day. Consider then what the load of anxiety must have been after the loss of those two ships, which it was impossible to replace in kind, and for which the two armored cruisers bought in Italy were but partial substitutes. Fortunately for Japan then, the terms of her alliance with Great Britain relieved her leaders from the necessity of considering any other navy than the Russian. She did not have to contemplate the entrance of any European state into her quarrel; a contingency which certain ominous incidents kept always before the eyes of the United States in our hostilities with Spain.

When Japan began hostilities, she had to recognize that in material force the total navy of Russia was much superior to her own. Yet, to carry out her objects, she must make an invasion over sea, an offensive movement on a large scale, depending upon the control of the sea, not only for the first success, but for the maintenance throughout of her operations. In this offensive purpose she was not hampered by any prepossessions in favor of a Fortress Fleet, as were the Russians. I find no trace of any such conceptions. On the contrary, Japan appears fully to have grasped, and to have acted upon, the principle that the one object of a navy is to control the sea; the direct corollary from which is that its objective is the enemy's navy — his organized force afloat. This they recognized in two ways. First, they allowed the Russians to assemble their vessels

in the Far East, until their navy as a whole was fairly divided in two. Next, they made the leading feature in their campaign to be attack, upon the half of the enemy's fleet exposed to them. I allude not merely to the successful torpedo attack on the vessels outside, with which hostilities opened, but also to the fact that for two months continuous attempts were made to harm those that were left, as well within as without the harbor; by bombardments, by laying mines, and by attempting to close the channel-way with sunken vessels. All these efforts were dictated by one principle: the destroying or neutralizing the enemy's fleet.

As the gunnery of the Russian forts improved, the same principle, or necessity, forced upon the Japanese additional care for their armored vessels. The range of bombardment was gradually increased and great care exercised to select dead angles. Security for themselves in this particular matter took precedence of injury to the inside enemy; because, dependent as they were upon controlling the sea, and inferior in aggregate naval force, the possible gain by bombardment did not nearly equal the possible injury from an unlucky hit. The risk became unjustifiable; but both the care of their own ships, and the attack of the enemy's proceeded from one principle, control of the sea. As regards the effect from these naval bombardments, our naval *attaché* in Port Arthur reported that the material damage was slight, but that the persistent aggressive action of the Japanese exercised at an early period a distinct and progressive deteriorating influence upon the *morale* of the Russian fleet, particularly upon the senior officers. This he must have gathered from other sources, as he himself did not get into the place until May 8. It was bombardment from the land side that finally drove the mechanics from the Russian yards, and thus helped to determine the attempted departure of the squadron, August 10.

When all these means — bombardment, mines, and channel blocking — proved ineffectual, the same conception of the end in view, and recognition of what was "imposed by the course of things," as Ranke has it, dictated the next action of the Japanese. The main fleet was withdrawn from the neighborhood of the port to a position remote from torpedo attack; to the Elliott Islands, some sixty miles from Port Arthur. There its security was further provided for by an elaborate system of booms, which not only covered the approaches to the islands but were carried from them to the mainland. By this means were protected both the anchorage of the transports, and the landing place on the peninsula of the troops destined for the operations against the fortress. This may be styled the defensive basis of the naval operations before Port Arthur; the furthering control of the sea by preserving your own vessels and supplies intact. This artificially protected area of sea about the Elliott Islands became the advance base of both land and naval operations, the concentration of which at one point, when feasible, as in this case it was, possesses evident advantages. It may be compared advantageously with the position of the British under Wellington at Lisbon, which served as both naval and military base during the Peninsular War.

Offensively, not merely was the Russian fleet to be deprived of its refuge, forced out into the open, to fight, by the siege operations, which when sufficiently advanced would render the position untenable; but in the meantime it was effectively held in check, made unable to escape without fighting, by an elaborate set of dispositions covering the surrounding waters, and based upon the Elliott Islands. These local dispositions are to be considered tactical, rather than strategic, and therefore not within my particular province. Nevertheless, I will name them, partly because, taken as a whole, the establishing of a secondary base and

the development of operations upon it, are in principle strategic, though the details are tactical; partly because the whole action illustrates the unity of the underlying strategic conception, which the Russians never mastered, or, if they did, never carried out; the conception, namely, that the one thing necessary was to paralyze the movement of the enemy's fleet, or to destroy it.

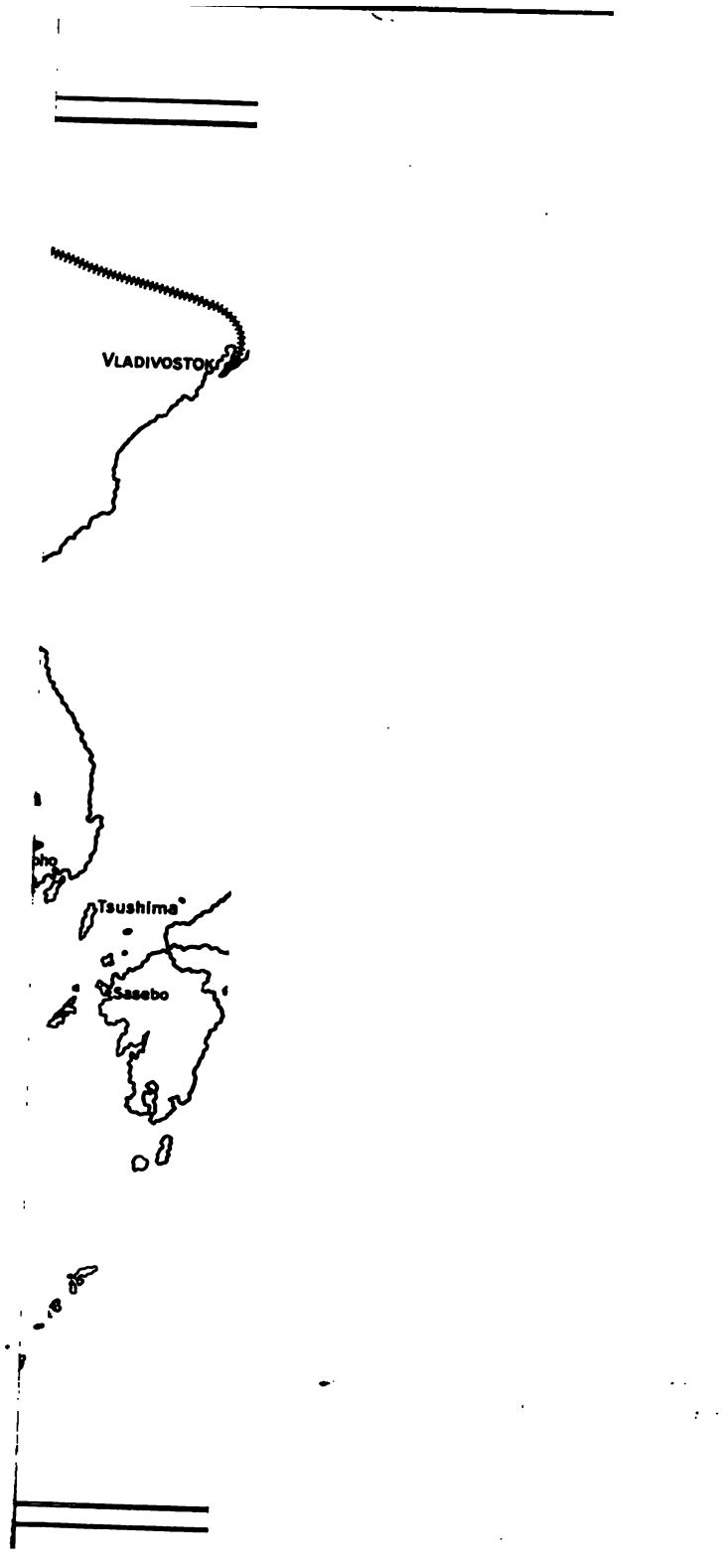
The Japanese dispositions to this effect have been summarized as "fences" by one of their officers, who I understand was on Togo's staff. First, several lines of mines moored in concentric circles round the entrances to Port Arthur and ultimately watched day and night from lookout towers on the heights of the Liao-tung Peninsula, as this fell bit by bit into the hands of the Japanese land forces. Immediately outside of these were the torpedo boats and destroyers, forming a second line, supported by a third, composed of second and third class cruisers. The fourth fence was the main fleet at the Elliott Islands. The inner lines correspond to the pickets, guards, and grand guards, of an army, and have the same office, to prevent attack from becoming surprise, by rapid development. The mines were intended, doubtless, to sink an enemy who touched one; but their essential tactical value was to impose delay, necessary to clear a channel, during which the Japanese fleet, warned by its lookout vessels, would have time to come up, as happened on the crucial occasions of June 23 and August 10, 1904. As a study in comparative tactics, doubly instructive because so far separated in time as naval epochs, and in material as sailing ships from steam and torpedoes, I would suggest the comparison of these dispositions with those of the British blockade of Brest in 1800–1801. These I have analyzed in "The Influence of Sea Power upon the French Revolution and Empire."

The expected movements of the Port Arthur fleet, against which these dispositions were taken, would have for their

object the reaching Vladivostok. Winter being over, the great drawback to that port, ice, ceased to exist; and the Japanese recognized that the enemy's fleet, if it got there, would be much more embarrassing to them. This, of course, was a strategic consideration: to prevent the enemy obtaining a gain of position. The result of August 10, in the return of the Russians to Port Arthur, was therefore rightly claimed by the Japanese as a strategic success. Thus, a Japanese officer, in a position to know the opinions of the leaders, wrote to a Japanese paper:

"If the Russians had succeeded in breaking the blockade on August 10, and several of their battleships and cruisers had reached Vladivostok, which could not have been invested for a long time, the Japanese navy and nation would have been placed in a most embarrassing position as regards the strategy of the second period of the fighting, namely, the period after the Baltic fleet's coming."

To this end partly was due the moving of Kamimura's armored cruisers, from before Vladivostok itself to the Straits of Korea — or Tsushima. There they were more immediately on hand to intercept the Port Arthur division, should it effect a partial escape; at hand also to reinforce the battleship division should an action begun before Port Arthur result in a running fight. Kamimura, in short, was at hand to coöperate, and by the officer whom I have quoted is called the fifth fence. The two divisions of Japanese armored ships, though separated, both occupied interior positions relatively to Port Arthur and Vladivostok; and therefore were favorably placed for mutual support against either enemy, or against the junction of the two. As a practical matter of fact, on the occasion of the Russian sortie of August 10, Kamimura did steam from Tsushima to the southern part of the Yellow Sea, — some two hundred miles. There he would be most surely in the path of any escaping Russians; for they might turn south,


VLADIVOSTOK
Tsushima
Sasebo

instead of rounding the point of Korea. The Cesarevitch, taking refuge in the German Kiao-Chau, of course did not come within reach of this division; which, being notified that most of the Russians had retired again to Port Arthur, resumed its position off Tsushima, with the result that it there met and fought the Vladivostok ships, effecting the destruction of the armored cruiser Rurik.

It may be mentioned here, that, besides the advantage of interior position, the dense fogs prevailing at that season and before, around Vladivostok, made the neighborhood of the port actually a worse position than Tsushima for checking the really dangerous operations of the squadron within. The chief peril to the Japanese from these ships was the injuring the communications, from Japan itself to the Elliott Islands. The exposure was greatest in the Straits of Korea, where Tsushima is. A dense local fog about Vladivostok might allow an escape to remain so long undetected as to cause very serious results. I have already mentioned that even the hurried irruption of the Vladivostok vessels, in July, with Kamimura close at hand, entailed the loss of an important siege train, so prolonging the siege of Port Arthur.

The course of the Japanese in the matters just discussed, though eminently correct, was so strictly in accord with accepted rules as to constitute no especial merit beyond that of a tenacious adherence to correct principles; a thing very far from easy to practice in moments of anxious perplexity. For instance: The desire to bombard something, to make a show of energy, is very keen at the beginning of a war, when no results have been yet achieved. This is no mere matter of pleasing the public, — playing to the galleries. It springs from the as yet unslaked thirst for action, for doing something, little matter what. It requires some grip of principle to recognize that, unless you have ships to burn, a match between ships and forts is not equal. The

Japanese were tempted, and yielded in part; but they were very cautious, and soon desisted, not, however, before one of their vessels, the Asahi, had an escape so narrow as to illustrate the danger of the undertaking. In all this they showed no particular originality, followed only accepted rules. Their greatest contribution to naval strategy in this war was the demonstration of exaggeration in the Fleet in Being theory. This they did demonstrate, as far as one conspicuous sustained success can be said to demonstrate anything. The demonstration is qualified, of course, by the fact that the Russian management of their fleet was so inefficient.

The Fleet in Being School, which in fundamental conceptions is substantially one with the so styled Blue Water School, attributes to naval force itself, independent of other factors, an importance and efficacy which in my judgment are exaggerated. It tends, for instance, to discard fortification, or to undervalue unduly its advantage to national defense and to maritime warfare. This line of thought, in its modern form, derives from the late Admiral Colomb of the British navy. While he cannot be held responsible for every extreme utterance of his disciples, I think it a fair presentation to say that he over-rates the proper deterrent effect upon over-sea operations exercised by a naval force, when it is strong, though inferior. Thus he says of the course of Torrington, the coiner of the phrase, in 1690,

> "A fleet in being, even though it was discredited [*i. e.*, beaten], inferior, and shut up behind unbuoyed sand banks, was such a power in observation as to paralyze the action of an apparently victorious fleet either against sea or shore. This is the part of the Battle of Beachy Head which constitutes its chief interest." [1]

Again, in his third edition (1899), he refers to this statement as defining his own opinion, and adds (page xli):

[1] "Naval Warfare," 1890, p. 122.

"The sea must be swept clear of defending ships or squadrons before that further step in naval warfare, the assault of territory, can be undertaken."

In the hands of some of his followers the mere existence of a strong though inferior fleet, within a moderate distance, should put a stop to an intended crossing until that fleet has been destroyed. This conclusion can be supported, and is, by historical instances in which such an effect has been produced. But to show that a certain course has frequently been followed does not show that course to be correct; just as the Japanese contrary procedure in the late war, though successful, does not prove conclusively and for all time that it would be right to act as they did. Circumstances alter cases; yet, upon the whole, I incline to say that the distinctive note of the Fleet in Being dogma is that no circumstance alters the truth of its proposition.

The difference between the course followed by the Japanese and the proposition upheld by the Fleet in Being School, as a whole, is that the Japanese, upon a fair calculation of probabilities, took a decisive step, a step that was bound to lead to results, despite the near presence of a strong hostile fleet; that they did not try to win without taking any risks, but only, to quote Napoleon, by getting the most chances in their favor. Had they lost after all, this particular error or the other might be charged against them; but in the main they would have been no less right than success has proved them to be. The Port Arthur fleet could have remained a fleet in being to this day, had the Japanese desisted from transporting their troops until they had destroyed it. It had only to stay in port. In short, such a fleet, according to its advocates, by its mere presence imposes upon its enemy inaction, paralysis, failure without a chance of success, so long as it itself persists in sticking in port. I think it not an exaggeration to say that acceptance of this theory would have compelled the Japanese

to postpone indefinitely their land operations, attending the enemy's pleasure as to naval action. The proof that this is not over-stated is to be found in comments I have already quoted. It is only just to say that there are men associated with this line of naval thought who present their conclusions more moderately. Thus, Sir George Clarke, long Secretary to the Committee of Imperial Defence, wrote: "An effective fleet," presumably inferior, "is a most powerful deterrent to naval operations, and especially to the over-sea transport of military forces." With this statement no one will quarrel; but the interest of the matter for us is to note the danger of the extremes to which men run who formulate military phrases without careful regard to all the factors.

It is now more than fifteen years since I read Colomb's "Naval Warfare." It, therefore, is not fresh in my mind; but, in referring to it for this occasion, I found among the leaves this memorandum, then made: "It appears to me that Colomb advocates too exclusively the abandonment of a combined expedition upon the mere threat of a naval force — not necessarily superior — but even equal or smaller." Upon the historical instances given in support of his theory, and which certainly show that this or that man did abandon an enterprise because of such a fleet in being, my comment was, in several cases, that had the action been different the result evidently would have been success. I then summed up the general impression made upon me by this proposition that it disregards Napoleon's sound *dictum* that "War cannot be made without running risks." This is the correlative of his other saying, just quoted, that war, accurately conceived, consists in getting the most of the chances in your favor.

These maxims not only justified risks, but they justify also the statement that a failure may be more creditable than a success; for failure may ensue upon the utmost accuracy of calculation and energy of action, while a success may be the result of chance, or of mere overpowering force.

The two questions in case of a risk which is under consideration are: Does the end justify the risk? and has every practicable precaution been taken to insure success? Nelson, proposing an assault upon Leghorn, endorsed Napoleon's maxim unconsciously; indeed, long before it was written. He proposed no mere adventure, he carefully discussed details, but he affirmed distinctly the necessity for accepting risks.

"Something must be left to chance. Our only consideration, Is the honor and benefit to our country worth the risk? If so, in God's name, let us get to work." "You may depend," he wrote on another occasion, "if I find the French convoy in any place where there is a probability of attacking them, they shall be either taken or destroyed at the risk of my squadron, which is built to be risked on proper occasions."

CHAPTER XV

RELATIONS OF COAST FORTIFICATIONS TO NAVAL STRATEGY

THE war between Japan and Russia has been instructive upon many subjects, but I apprehend in none more so than in the real question ultimately involved in the matter now before us — the relations of coast fortification to naval force; for in this we are dealing not with details, however valuable, but with broad general principles fruitful of a right or wrong national policy. The Blue Water School is the lineal descendant in the next generation of the Fleet in Being School. The two in succession afford illustration of a principle bearing its due fruit, by development. Both involve the relations between land operations and fleets. In this, as in all military estimates, a safe solution depends upon an accurate adjustment being reached between the two, based upon a full realization of the functions each is to discharge in that common action we call combination; by which the two so act as to be in effect one. Coast fortification, seacoast fortresses, are on a mental border line, between the conceptions of naval and military as distinct classes of operations of war; just as they are strong points occupied upon the physical boundary which nature draws, between the spheres respectively of fleets and armies. It is therefore not extraordinary that debate should arise on this debatable ground.

When war exists between two nations separated by the sea, it is evident that the one which invades territory occupied by the other takes the offensive, and that the instru-

ment of offense is the arm which carries on the invasion, that is, the army. The navy preserves, and assures, the communications of the army. That the navy alone makes invasion possible, does not make it the invading force. That it alone makes the offensive possible, does not make it the offensive arm. That its own mode of action is offensive does not necessarily constitute it the offensive factor in a combined operation. In the joint action it takes the defensive. That, in pursuit of this defensive rôle, it takes continual offensive action whenever opportunity offers to destroy an enemy's ships, does not alter the essential character of its operations. It defends by offensive action, wherever its guns reach; but it defends. This certainly was the function of the Japanese navy in the late war.

Again, granting an invasion, what relations to the war is borne by the coast fortresses of the country invaded? What function do they discharge? Apparently defensive, on the first glance; but is this a true account of the matter? Is the obvious the exact truth? On the contrary; just as the method of the navy is offensive, while its function is defensive, so the method of the coast fortress is defensive, but its function offensive. So far from defending a country, a coast fortress in itself cannot protect against invasion, unless there is no coast line except the fortress itself; — a condition manifestly impossible. Landing can almost always be effected beyond its reach. Port Arthur in itself did not produce an iota of effect upon the landing of the Japanese besieging force, which took place sixty miles away. During that part of the operation, Port Arthur did not begin to defend itself, much less the country.

Fortresses, coast or other, defend only in virtue of the offensive power contained behind their walls. A coast fortress defends the nation to which it belongs chiefly by the fleet it shelters. Its works, and the troops which man them,

conduce to the activity of that fleet, by assuring to it supplies, repairs, and shelter in extremity. This being the case, it is plain that the coast fortresses of an invaded country are really instruments of offense, although the country itself, by the mere fact of being invaded, is waging a defensive war. The particular characteristics of the fortress are a matter of detail only; its essential function is offensive, because it conduces to defense only by facilitating offense. This is exactly the relation of fortresses to a land frontier. Their protective function to their country does not extend beyond the range of their guns; indeed, usually does not reach so far. It is because of the shelter given to garrisons, large enough to be able to take dangerous action against the communications of an invading army that the fortress defends. The garrison being on the flank of the enemy's communications menaces the life, and so protects by arresting advance. It is its offensive power which exerts the effect; not its defensive.

In land warfare, it becomes immediately obvious that a fortress must be secured on every side, either by nature or by art. Fortification is the art of supplying deficiencies in natural protection. On an exposed sea frontier, this is equally true, but much less obvious. We have come to look upon sea-coast fortification so entirely as a defensive measure against fleets, that sight has been lost in great measure of that true conception of fortresses as offensive instruments which I have been asserting. The consequence is that it might be possible to deprive our fleet of the use of this or that important naval base, by an army landing some distance away, as the Japanese did at Port Arthur; only I fear much more easily, for I doubt if any one of our naval bases is nearly as well protected on the land side as was Port Arthur.

This result, if true, is to my mind an interesting illustration of the gradual working of a mistaken principle. Men

begin: Coast fortresses serve only for defense. They continue: The navy defends better than any fortress can. They conclude: Therefore money spent on fortresses is wasted, and should be spent on the fleet. This is, briefly, the syllogism of the Blue Water School. Granting the premise, the conclusion follows; but the premise is erroneous. Strategically, coast fortresses are not for defense, but for offense, by sheltering and sustaining that force which against an invader is the offensive arm; that is, the navy. It follows that they must be developed on the land side as well as on the sea side, in order to preserve them against reduction, either by *coup de main* or by prolonged siege, as at Port Arthur. Having regard to all the circumstances, Santiago may be said to have fallen by *coup de main*, as Port Arthur by siege. In both cases, the fleet was deprived of a base. That is the essential feature in the result; the accompanying destruction of the fleet in both cases was simply a cumulative incident, though most satisfactory. Had either fleet escaped to another fortress, to Havana or to Vladivostok, the gain or loss of the port from which it had escaped would have mattered comparatively little to either belligerent, because the offensive element of the place had escaped, and could be utilized elsewhere.

Defense on the sea side, against direct naval attack, is comparatively easy; because on that side siege works cannot be constructed, and ships, the remaining means of attack, are at a recognized disadvantage contending against forts. Some dispute this; but the Japanese will not be accused of lack of daring, and they did not long expose their ships to the Russian forts. During the bombardment period, they increased the range, an element of safety; and even so, one of their ships, the Asahi, had a narrow escape from serious injury. It is, therefore, on the land side that coast fortresses most need to be made secure, for there nature does least for them.

These principles are general, but of course must be modified, adjusted, to the requirements of each case. Granting even a supreme navy, such as that of Great Britain has been in past times, coast fortresses are needed; for there never has been a time, and never can be, that the navy of an extended territorial power can everywhere by itself alone prevent invasion. As Sandwich wrote to Rodney, the navy cannot be in force in every quarter. In the past, the British navy secured the British Islands; but in other seas, it needed Gibraltar and similar positions. The necessity of fortification in the various positions differed, according to the facility with which a possible enemy could reach them. Even in the British Islands themselves, a successful invasion, in other times or now, would doubtless propose to itself the seizure and destruction of dockyards as a principal end, if undefended on the land side. The story of Gibraltar is familiar to us all. It survived in virtue of natural and acquired defensive power which has passed into proverb; but take the case of Malta and Egypt in 1798. These were not British possessions; but they were great British interests. Had Alexandria been a British fortress, adequately garrisoned, the interference with Bonaparte's operations in Egypt would have been even more serious than the subsequent blockade of the place. He would have had to reduce it, as he afterwards had to reduce Acre, and failed; a failure which compelled abandonment of his Syrian enterprise. Malta, too, would have detained him longer, if adequately defended. This is shown by the fact that to regain it took the British two years, by siege and blockade; and how essential it was to accomplish this is sufficiently proved by Nelson's eagerness in the matter.

Besides the difficulty of an enemy's reducing a coast fortress, due to its distance and surroundings, an important consideration in determining the strength to be given it,

regarded as a naval base, is the number of available ports on a particular coast. Take, for instance, our Pacific Coast. The number of commercial ports suitable for a fleet is limited as compared with the Atlantic Coast. The loss of one of the best is therefore a greater misfortune. Assuming our battle fleet to be concentrated in one ocean or the other, it seems clear that, if in the Atlantic, and war were to make necessary to transfer it to the Pacific, the loss of a naval station there before the fleet's arrival would be more serious than in the reverse case; because there the alternative harbors are fewer.

Though such misfortune would in any event be very serious to a fleet, it seems scarcely possible that an enemy could so occupy in force all available positions on the Atlantic and Gulf that the fleet on arriving should find no place to which to go, and to receive the supplies necessary to place it on a fighting basis. The enemy himself must concentrate. His battle fleet therefore can be at only one place in a coast line of two thousand miles; and it will not be the case that he can choose his position with the comparative assuredness with which Togo settled himself at Masampo, knowing that the enemy had but one possible port, Vladivostok.

Togo's problem would have been more difficult, if the Russians had still had the two ports, Port Arthur as well as Vladivostok; but even so he would have been greatly helped by the projection of the Korean peninsula, which so singularly resembles that of Florida. The correspondence of Key West to Masampo, in point of situation, is very striking; but the great difference of scale would have made Rozhestvensky's success less probable than that of a United States admiral approaching our eastern coast. Evasion by the approaching fleet, if desired, would here be easier; interception by the opponent more difficult. Besides, Masampo was practically a Japanese possession; its analogue,

Key West, we may hope — even though the hope be over sanguine — will be sufficiently fortified to stand out against ship attack. If then, New York, our principal yard, had passed into an enemy's possession, there would remain to an approaching American fleet, Boston, Norfolk, Guantanamo, Key West.

From the conditions stated may be inferred the imminent necessity of constituting coast fortresses of the securest type on both our Atlantic and Pacific coasts; but especially upon the latter, because it is the weaker in point of the elements which make for sea power. In any scheme affecting the defense of the Pacific Coast, the Hawaiian Islands would naturally command conspicuous consideration. I conceive that our "fleet in being" — by which I mean not the inferior fleet thus conventionally named, but one at least equal in intrinsic efficiency and numbers to that of any existing state, except Great Britain, — needs fortified ports, to assure its action; ports fortified adequately on the land side, and provided with garrisons suitable in number, in efficiency, and in stored resources, to maintain a siege at least during the period necessary for the fleet to be transferred from the one coast to the other. In such a case, a fleet acts with confidence, because assured of finding the means which it needs for effective offensive action; and the known fact that it is so assured will constitute a factor of international consideration, making for peace, of more than double the weight that can attach to it if it be possible that, on arriving off a threatened coast, the fleet may find a chief naval station in the hands of the enemy, as did Rozhestvensky. It is of course a commonplace, certified to by experience, that troops unfit to meet regulars in the field can hold fortified lines; Jackson at New Orleans, Bunker Hill in measure, are instances which occur at once to American memories. It is vain to expect that from our civilian population can be organized armies

speedily fit to meet in the field those of the military nations; but it may be possible to organize the system of defenses for the naval ports, making of them coast fortresses of the Port Arthur type, which a citizen soldiery could hold; if willing, in their local and national interests, to undergo the comparatively brief training necessary to make them efficient supports to a regular garrison.

In short, and in conclusion, there has been nothing in the whole course of the war between Japan and Russia so illuminative as the part played by Port Arthur. It is thus illuminative just because the light it throws is light upon a point which might have been considered doubtful, since it has been so much disputed by that particular trend of thought, embodied successively under the epithets "Fleet in Being" and "Blue Water." I myself never have had any doubt on the matter, so that I received no particular instruction. My opinion was merely confirmed, not changed. Conditions being what they were when the war began, the entire issue turned upon a coast fortress; upon its possession by one party or the other. The question would not have been altered in principle, only in application, if the Russian fleet had been concentrated at first in Vladivostok. There is something to be said in favor of each port; but the balance inclines to Vladivostok, granting the effective ice-breakers. Investment by land would, I think, be more difficult, a larger and more protracted operation, although I cannot pronounce decisively on that point, being outside my province. It looks more difficult.

As a maritime question, however, it is clear, that if the whole Russian Far East squadron of armored ships had been concentrated in Vladivostok, as it might have been, it must have been invested there, as it actually was at Port Arthur; and if the place held out till Rozhestvensky approached (which is more than probable, seeing how long Port Arthur resisted, though only a recent acquisition

of Russia), Rozhestvensky on arrival would have had two ports to enter instead of one. No position, such as Masampo, would have enabled Togo effectively to hold in check both Russian divisions. In the contingency imagined, one perfectly possible, he must either have acquiesced in Rozhestvensky entering Port Arthur to clean and refit for further action; or, in order to prevent this, must have quitted his watch of Vladivostok, permitting the exit of the fleet within and the possible junction of the two Russian bodies. This, if effected, would not only have constituted a great numerical preponderance, but would have increased Russian chances by the moral effect that a successful combination and evident superiority afford. If this junction were thwarted, by the Japanese navy clinging to one port or the other, it would have at least to fight in rapid succession two enemies, each of which equalled it in material force; nearly, if not quite. To the weaker fleet such successive engagement gives a better chance than that against the two united. Nevertheless, the odds remain heavy; and the Japanese would not have had that precious opportunity for entire refit, gained for them by the long interval between the fall of Port Arthur and the arrival of Rozhestvensky.

To exhaust suppositions, it may be imagined that, under the circumstances of the Russian Far East fleet being in Vladivostok, the Japanese would have undertaken to reduce it and Port Arthur simultaneously, realizing as they would the awkward situation constituted for them by the arrival of the Baltic fleet with the two ports still open to it, and the Eastern naval division still in existence. This dilemma, possible for the Russians to constitute from the first, is probably the strongest argument for Vladivostok. The Russian fleet there would have imposed upon the Japanese divergent points of interest, tending to divide their efforts. The absence of the Baltic division gave the Japanese the day

of opportunity which they admirably improved. The Russians helped them further by putting together the two objects, Port Arthur and their fleet, close by the points where the intended invasion of Korea and Manchuria must begin. Being for the moment inferior, and on the defensive, instead of provoking their enemy to divide his forces, they compelled him, by their own dispositions, to concentrate at the point most dangerous to themselves. In this they circumscribed the area in which the energies of Japan must be exerted, and enabled her entirely to disregard Vladivostok, which gave no support in the conflict, because eliminated by Russia herself. That the Russians so acted was due, almost certainly, to their wish to preserve Port Arthur, and to their vicious theory of a Fortress Fleet; a fleet subservient to a fortress, instead of the fortress subservient to the fleet. It would appear from the comment of eye-witnesses on the action of the Port Arthur fleet, that there was at no time a disposition to take advantage of naval opportunities; that is, of the opportunity which offered to injure Japanese vessels, otherwise than by stationary mines, which were used extensively. Yet, though not disposed to use their fleet, they tied it to the fortress.

Under proper conceptions, the Russian fleet, if at Vladivostok, somewhat inferior, but not decisively so — as was proved so late as August 10 — would by its menace to Japanese communications have impelled them to besiege and blockade, as they did at Port Arthur. Reasoning from what the Japanese actually did we know that the Russian division, whether at Vladivostok or Port Arthur, would not, and, in my judgment, should not, have deterred them a day in transporting their troops. Having determined on war, they saw before them, as clear as though written in letters of fire, that the time which could elapse before the Baltic fleet got out, gave their one opportunity to obtain decisive success; success that would give them, though

the weaker, a good fighting chance. They expected, too, at the first, that Port Arthur would fall very much sooner than it did; and with it the fleet, which would be in fact the one really decisive effect open to them. That gained, they could fight on with reasonable prospect. As confirming this statement, bear in mind continually Togo's signal to his fleet when Rozhestvensky was sighted, although by that time the fall of Port Arthur and the accompanying destruction of half the Russian navy were already accomplished facts. It is known that even then the anxiety of the Japanese Government was intense concerning the Baltic fleet, and so continued until its long delay in arriving had enabled them to refit their vessels.

The same strategic reasoning would have held for Japan, if the Russian fleet had been in Vladivostok. It would have compelled them to besiege and blockade. If, for the reasons I have advanced, they undertook Port Arthur simultaneously, the two operations would have taken one hundred and fifty thousand men from the army advancing in Manchuria; besides which, the second siege would add immensely to the expense which so drained Japan, and which undoubtedly was the chief factor in causing her to wish peace. A Japanese officer near to Admiral Togo wrote for publication, some time afterwards, with reference to the attempted escape of August 10: "If the bulk of the Port Arthur squadron had got to Vladivostok, the Japanese would have been greatly embarrassed for the rest of the war, and the danger from the Baltic squadron greatly increased." There seems little reason for doubting that the same consequences would have followed if the Port Arthur division from the beginning had been in Vladivostok.

The misuse of their powerful division in Port Arthur by the Russians is the more suggestive, the more illustrative of the disastrous consequences flowing from a false principle,

such as Fortress Fleet, because from the beginning they had formulated a general plan of campaign which they carried into action; a plan which was correct for the party momentarily weaker, but ultimately stronger, as Russia was. The intelligence officer of one of our ships stationed at Newchwang, at the beginning of the war, reported that the common talk among the Russian officers there was, that they could not hold the Liao-Tung peninsula, on which Port Arthur is, nor yet Lower Manchuria; that they would garrison Port Arthur for a siege, and that the army in the field would fall back successively on Liao-Yang and Mukden, to Harbin, disputing the defensible positions, but falling back. Harbin reached, they would make a stand, reinforced by the troops and material already accumulated there during the retreat, and to be yet further increased, as far as necessary, while they continued to hold the place. Then, when all was ready, they would assume the aggressive in numbers sufficient to bear down all opposition. Harbin, in its turn, would thus have illustrated the usefulness of fortresses.

Such common talk proceeds from one of two causes; probably from both. Either it is leakage from higher quarters, or it is what is clearly indicated to instructed military men as the correct course, which this certainly was. Kuropatkin was in the exact situation of the Archduke Charles retreating before the French in 1797; the year after his successful campaign in the Danube valley, already largely cited. Of the situation in 1797, Bonaparte wrote to his Government:

"If the enemy had committed the folly of awaiting me, I should have beaten them; but if they had continued to fall back, had joined a part of their forces from the Rhine and had overwhelmed me, then retreat would have been difficult, and the loss of the army of Italy might entail that of the Republic."

Kuropatkin's plan was essentially correct, and in his retreat he had got no farther than Mukden, when Japan indicated her willingness to treat.

Of the Russian scheme, Port Arthur was an essential feature. It provoked the Japanese to detach from their main advance a body of, from first to last, over one hundred thousand men.[1] They were compelled to do this by no point of national susceptibility because of the wrong done them by Russia, France, and Germany, in 1895, — though that may have counted, — but by the necessity of smashing the naval division within before the Baltic fleet arrived out. As we have seen, the margin of time by which they gained this relief, though sufficient, was not too great; and we know, too, that the commander of the fortress was condemned to death for premature surrender. The Russian retention of Port Arthur was therefore no compromise with national pride or military hesitancy. It was a correct adjustment, of that feature of the Russian conditions, to the campaign as a whole; subordinate to the main plan, but conducive to its success. The numbers of the Russian main army were reduced by the amount of the garrison; but in order to overcome the garrison, the enemy had to reduce his force by from double to treble the same amount.

This excellent disposition moreover contributed to the delay which was the essential first object of the Russians. Port Arthur here effected in kind, and came near effecting in degree, the same purpose that Genoa did in 1800, in the campaign of Marengo. The siege of Genoa held the Austrian general, Melas, while Bonaparte was crossing the St.

[1] Sir W. Nicholson, Chief of the British Imperial General Staff, in a preface to a book entitled "The Siege and Fall of Port Arthur," by W. Richmond Smith, estimates the Japanese force needed to capture Port Arthur at not less, in the aggregate, than one hundred and fifty thousand men. (See American Historical Review, April, 1911; page 521.) The Japanese losses in the siege have been estimated independently at fifty-nine thousand. (Journal of the Royal Artillery, October, 1905; page 322.)

Bernard, and until he had assembled his army in Lombardy across the Austrian communications; just as the arrival of Rozhestvensky, if Port Arthur and its fleet were still standing, would have menaced the Japanese sea communications. Genoa had obtained the delay that Bonaparte needed; not till then did the emaciated garrison yield to starvation what they had denied to force. There seems no sufficient reason to doubt that an equal obduracy of resistance at Port Arthur might have accomplished the same; but Stoessel was not Masséna. I myself, writing before the sortie of August 10, and depending wholly upon the information open to the public, had then occasion to note the urgency of the Japanese navy for the speedy reduction of Port Arthur, and the sense of danger latent in the simultaneous existence of the port and of the still distant Baltic fleet. The Japanese Navy Department cried, "Haste!" the Russian coast fortress replied, "Delay!"

So the two parts of the Russian scheme, a true combination, in which the parts were two but the action one, were working successfully, each bearing its share; but the commander of the fortress proved inadequate, and the fortress fleet, however inspired, did nothing. Delay was obtained; opportunity offered; but delay is useless if insufficient, and opportunity worthless when not improved. It is of little avail to postpone the evil hour, if you must encounter it at last. Nevertheless, although the delay purchased by the resistance of Port Arthur did not obtain ultimate victory for Russia, it most probably affected unfavorably the bargaining power of Japan in the peace negotiations; based as this must be on the degree of her advance and general position of advantage.

There is one further conclusion to be drawn from the war between Japan and Russia, which contradicts a previous general impression that I myself have shared, and possibly in some degree have contributed to diffuse. That

impression is, that navies depend upon maritime commerce as the cause and justification of their existence. To a certain extent, of course, this is true; and, just because true to a certain extent, the conclusion is more misleading. Because partly true, it is accepted as unqualifiedly true. Russia has little maritime commerce, at least in her own bottoms; her merchant flag is rarely seen; she has a very defective sea coast; can in no sense be called a maritime nation. Yet the Russian navy had the decisive part to play in the late war; and the war was unsuccessful, not because the navy was not large enough, but because it was improperly handled. Probably, it also was intrinsically insufficient — bad in quality; poor troops as well as poor generalship. The disastrous result does not contravene the truth that Russia, though with little maritime shipping, was imperatively in need of a navy.

I am not particularly interested here to define the relations of commerce to a navy. It seems reasonable to say that, where merchant shipping exists, it tends logically to develop the form of protection which is called naval; but it has become perfectly evident, by concrete examples, that a navy may be necessary where there is no shipping. Russia and the United States to-day are such instances in point. More and more it becomes clear, that the functions of navies is distinctly military and international, whatever their historical origin in particular cases. The navy of the United States, for example, took its rise from purely commercial considerations. External interests cannot be confined to those of commerce. They may be political as well as commercial; may be political because commercial, like the claim to "the open door" in China; may be political because military, essential to national defense, like the Panama Canal and Hawaii; may be political because of national prepossessions and sympathies, race sympathies, such as exist in Europe, or traditions like the Monroe Doc-

trine. The Monroe Doctrine in its beginnings was partly an expression of commercial interest, directed against a renewal of Spanish monopoly in the colonial system; it was partly military, defensive against European aggressions and dangerous propinquity; partly political, in sympathy with communities struggling for freedom.

A broad basis of mercantile maritime interests and shipping will doubtless conduce to naval efficiency, by supplying a reserve of material and *personnel*. Also, in representative governments, military interests cannot without loss dispense with the backing which is supplied by a widely spread, deeply rooted, civil interest, such as merchant shipping would afford us.

To prepare for war in time of peace is impracticable to commercial representative nations, because the people in general will not give sufficient heed to military necessities, or to international problems, to feel the pressure which induces readiness. All that naval officers can do is to realize to themselves vividly, make it a part of their thought, that a merchant shipping is only one form of the many which the external relations of a country can assume. We have such external questions in the Monroe Doctrine, the Panama Canal, the Hawaiian Islands, the market of China, and, I may add, in the exposure of the Pacific Coast, with its meagre population, insufficiently developed resources, and somewhat turbulent attitude towards Asiatics. The United States, with no aggressive purpose, but merely to sustain avowed policies, for which her people are ready to fight, although unwilling to prepare, needs a navy both numerous and efficient, even if no merchant vessel ever again flies the United States flag. If we hold these truths clearly and comprehensively, as well as with conviction, we may probably affect those who affect legislation. At all events, so to hold will do no harm.

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